Abstract

The article aims to give an overlook on Brazilian law system in the environmental field. It will follow the logic going from the constitutional analysis to under legislation exposition. The main principles of Brazilian environmental law will be given with a short description of how they interconnected with the upper mentioned legislation and the entities’ activities of the National System of the Environment (Sisnama). The final subchapter will give a global view of the executive, deliberative and advisory organs that act on the preservation of a safe and healthy environment in Brazil.

Keywords: Environment, Brazil, Law System, Environment Protection, Regulation, Principles, Administrative organs, Enforcement.

1. Introduction

The existence of climate change may be for certain groups a fallacy, but the international gatherings on a range of climate forums and conventions shows that the phenomenon is not only real, but a burden that the entire world has to deal with. For this purpose, actions have been taken all across the globe as the carbon sequestration deals of UNFCCC\(^1\) with the Kyoto Protocol\(^2\) and the Paris Agreement\(^3\).

Brazil ratified both agreements\(^4\) turning it into law in its jurisdiction, committing to the protection and achievement of the goals set. Further, the Brazilian law system correlated to the environment protection was adapted over the years to accommodate the research, technologies and trend legislation innovations, equipping the administrative and legal institutions that enforce the laws and policies on environmental protection. The Brazilian law system concerning the environment is intricate and extensive, as Brazil adopts the civil law system, which can lead to overprotection.

\(^{1}\) UNTS 1994, 107.
\(^{2}\) Farkas Csamangó 2014, 154.
\(^{3}\) Paris Agreement 2015.
\(^{4}\) Camara dos Deputados 2016.
The Constitution brings several rights concerning the preservation of the environment, contributing to an entanglement of laws, policies and institutional aspects, all tied to the Constitution of 1988, in the hope to safeguard as many subjects as possible from any potential authoritarian government,\(^5\) has a long list of rights and duties, being one of them the environment.\(^6\)

Having it in mind, the Constitution chapter on the environment will be analysed along with the significant laws that guide the environment protection and the regulation of the bureaucratic system and the legal actions. After that, it will be given the guiding principles that may impact the environmental field and other principles that are focused on the environment.

At last, will show the organs that constitute the Brazilian system on environment defence and preservation. As well the organ responsible for legal actions in case of environmental harm and disasters, giving a broad but prolific view of Brazilians laws on environment as well of its organisms and mechanisms to implementation of the laws and its enforcement.

2. The Constitution and Relevant Legislation

The Constitution of the Federative Republic of Brazil from 1988 gives the guidelines for other legislations, setting in its text rights that must be implemented, most of them by regulations.

Brazil follows a centralised federal system, so all the federated states must comply with national and federal laws, and are obliged to inspect their application within their state and city borders.\(^7\) Although, the administrative competency to protect the environment, to combat the pollution, to preserve forest, fauna and flora, is common and is set in the Article 23, items VI, VII and VII of the Constitution\(^8\).

As per the legislative competency on the environment, it is concurrent between Union, States, Municipalities and the Federal District, as transmitted by its article 24, items VI and VIII. The concurrent competency means that the Union will set general base legislation and the other members of the federation will subsidise, complementing the general legislation of the Union where it let blanks or gave away the competency.\(^9\)

The Constitution has an entire chapter likewise to verse on Environment, placing it as an essential asset that must be protected and inspected.\(^10\) Article 225, Federal Constitution of Brazil\(^11\) recognises environmental protection and equilibrium as

\(^5\) Silva 2014, pp. 45–47.
\(^6\) Brazil 1988, Article 225.
\(^7\) Silva 2014, pp. 481–483.
\(^8\) Brazil 1988, Chapter II, Article 23.
\(^9\) Bessa 2010, 88–90.
\(^10\) Ibid 319–320.
\(^11\) Brazil 1988, Article 225. “All have the right to an ecologically balanced environment, which is an asset of common use and essential to a healthy quality of life, and both the Government and the community shall have the duty to defend and preserve it for present and future generations. Paragraph 1. In order to ensure the effectiveness of this right, it is incumbent upon the Government to:
- preserve and restore the essential ecological processes and provide for the ecological treatment of species and ecosystems;
a fundamental right that must be protected for the present and future generations. The Constitution’s text also declares some valuable principles among others: polluter pays, precautionary, public participation, sustainable development, preventive action and the risk assessment, social function of the property, intergenerational solidarity and ubiquity.

Inferior legislations regulate most items of the constitutional chapter as the National System of Nature Conservation Units,12 the Mining Codex,13 the National Policy on Water Resources,14 National Solid Waste Policy (PNRS),15 the National Basic Sanitation Policy,16 Urban Land Installment Law,17 the Public Forest Management Law18 and the Cities Statute.19 Nonetheless, the second major legislation in the environment field is The National Environment Policy instituted by the Law n. 6.938 from August 1981,20 that focus on giving goals and mechanisms to preserve the environment. Besides, the law constituted the National System of the Environment (Sisnama) and instituted the Environmental Defence Register, all focusing on the general ground given by the Federal Constitution of 1988.

II – preserve the diversity and integrity of the genetic patrimony of the country and to control entities engaged in research and manipulation of genetic material;
III – define, in all units of the Federation, territorial spaces and their components which are to receive special protection, any alterations and suppressions being allowed only by means of law, and any use which may harm the integrity of the attributes which justify their protection being forbidden;
IV – demand, in the manner prescribed by law, for the installation of works and activities which may potentially cause significant degradation of the environment, a prior environmental impact study, which shall be made public;
V – control the production, sale and use of techniques, methods or substances which represent a risk to life, the quality of life and the environment;
VI – promote environment education in all school levels and public awareness of the need to preserve the environment;
VII – protect the fauna and the flora, with prohibition, in the manner prescribed by law, of all practices which represent a risk to their ecological function, cause the extinction of species or subject animals to cruelty.

Paragraph 2. Those who exploit mineral resources shall be required to restore the degraded environment, in accordance with the technical solutions demanded by the competent public agency, as provided by law.

Paragraph 3. Procedures and activities considered as harmful to the environment shall subject the infractors, be they individuals or legal entities, to penal and administrative sanctions, without prejudice to the obligation to repair the damages caused.

Paragraph 4. The Brazilian Amazonian Forest, the Atlantic Forest, the Serra do Mar, the Pantanal Mato-Grossense and the coastal zone are part of the national patrimony, and they shall be used, as provided by law, under conditions which ensure the preservation of the environment, therein included the use of mineral resources.

Paragraph 5. The unoccupied lands or lands seized by the states through discriminatory actions which are necessary to protect the natural ecosystems are inalienable. (…)"
Another critical aspect are the environmental principles in Article 2 and items, which brings ten principles, as the sustainable development and protection of ecosystems.\textsuperscript{21} The National Environment Policy also will guide all the sectors, on the preservation, improvement and restoration of the environment which can lead to a better and healthier life, socio-economic development, human dignity and national security – being much similar to the ones charted in the Constitution.

Additionally, the law gives the definition of ‘environment’ which is the “joint of conditions, laws, influences and interactions of physical, chemical and biologic nature that enables and rules the life in all its forms.” ‘Degradation’ is the adverse modification of the environment and ‘pollution’ as being the degradation that affects the quality of the environment in all its forms (aesthetically to health), direct or indirectly.\textsuperscript{22} ‘Polluter’ is any person (legal or physical) that contributes to the activity that caused the environmental damage, direct or indirectly, independent of guilt, implementing the objective responsibility for environmental damages.\textsuperscript{23}

That last innovation conveyed by the policy is the legitimacy of Public Ministry (state and federal)\textsuperscript{24} to prosecute civil and criminally responsible for the damages caused to the environment,\textsuperscript{25} not needing to prove them guilty, only required to prove the existence of action by omission or commission. Furthermore, the causation, facilitating the application of the polluter pays principle and the accountability of polluters and public agents to indemnify and repair the damages caused.

Thirdly, but not less critical legislation on environment, is the Law 12.651/2012, known as The New Brazilian Forestry Code, revoking the old codex from 1965. It arrived in the system carrying many dissent on the constitutionality of some of its articles,\textsuperscript{26} after years the Supreme Federal Court declared the constitutionality most of the tackled articles and clarified the interpretation of others, preserving most of it unaltered. The new code determines that the owner has responsibility to protect the environment and to maintain the borders of its property and the areas of preservation.

The codex treats two different forms of protection: The Area of Permanent Protection (\textit{APP}) and the Legal Reserve (\textit{RL}).\textsuperscript{27} The \textit{APP} area is inside the property designated to ensure the sustainable use of the land and as well to safeguard the natural resources and is not delimited by law where it should be. The \textit{RL} is a protected area also located within the property to preserve the water resources, landscape, geological stability and biodiversity which delimitates its location in the land. These are usually areas surrounding water (rivers, ponds, lakes), mountains, mounts, plateaus, sand bars, mangroves, slopes and others important areas to assure the quality of the environment.

The legislation also made some important definitions, as the technical concepts of sustainable uses and the composing regions in the Legal Amazon:\textsuperscript{28}

\begin{itemize}
\item \textsuperscript{21} Ibid.
\item \textsuperscript{22} Ibid. Article 3, I-III, free translation.
\item \textsuperscript{23} Bessa 2010, 217–221.
\item \textsuperscript{24} Ibid. 117.
\item \textsuperscript{25} Lei n. 6.938 1981, Articles 14-15.
\item \textsuperscript{26} STF 2018.
\item \textsuperscript{27} Lei n. 12.651 2012, Article 3.
\item \textsuperscript{28} Ibid. Article 3.
\end{itemize}
the states of Acre, Pará, Amazonas, Rondônia, Amapá and Mato Grosso and the regions on the parallel north 13°S of the states of Tocantins and Goiás and the meridional west 44°W of the state of Maranhão.

Another important definition is the carbon credit included in 2012, which means lawful title under an intangible and immaterial asset that can be transacted with economic value.\(^{29}\) The carbon credit later in Brazil evolved to more elaborated plan, integrated to the Reducing Emissions from Deforestation and Forest Degradation – REDD+.\(^{30}\) Now it is implemented as the REM for early movers\(^ {31}\) in the Legal Amazon, that has been contributing to the reduction of deforestation in the Legal Amazon, especially in the State of Mato Grosso, before leading on it.

Furthermore, beneficial laws on accountability and enforcement instituted by the previous laws: the law of Crimes Against the Environment,\(^ {32}\) that brings new aspects of the fight against environment damages and crimes, giving the administrative organs and the Public Ministry (state and federal) power and mechanism to tackle these types of crimes and damages.

The sanctions can be administrative and criminal, and one does not annul the other. The law defines the typification of the crimes and its sanctions. The crimes against the environment the ones are committed to the fauna, flora, and that cause any pollution. It instituted as well the accountability and penalisation of legal entities in this kind of crimes. The sanctions can be of right restrictions, liberty privation and fines.

The penalty of imprisonment can be substituted for the right restrictions penalties if the crime committed was unintended or the penalty is up to 4 years and when by the analysis of the circumstances and the social conduct of the condemned comes to the conclusion that the deprivation of right is enough to the effects of rebprobation and privation of a new crime.\(^ {33}\)

The rights’ restriction penalties can be community services, temporary interdiction of rights, total or partial suspension of activities, pecuniary fine and domicile reclusion.\(^ {34}\) The imprisonment penalty will depend on the circumstances and the crime committed, the hirer condemnation can be up to five years of prison, whether without aggravating. This penalty can be combined with a pecuniary fine to be applied according to the damage caused. Other factors of the case, which goes from fifty BRL up to fifty millions BRL,\(^ {35}\) all the pecuniary amount collected as fines per environmental infraction will be reverted to the National environment Fund, navy Fund, and states and municipal funds for the environment.\(^ {36}\) These penalties do not exclude the administrative infringement process and penalties, being independent.

\(^ {29}\) Ibid, Article 3, XXVII.
\(^ {30}\) Gomes de Freitas 2015.
\(^ {31}\) REM Mato Grosso 2020.
\(^ {32}\) Lei n. 9.605 1998.
\(^ {33}\) Ibid. Article 6.
\(^ {34}\) Ibid. Article 8.
\(^ {35}\) Ibid. Article 75.
\(^ {36}\) Ibid. Article 74.
The administrative sanctions can be an advertence, fine and daily fine (until the conduct and its effects are ceased and the restrictive of rights are suspension and cancellation of licenses and authorizations, loss or restriction of tax and financing benefits and, the prohibition to engage in contracts with the Public Administration.37

A remarkable mechanism to tackle damages is the Term of Adjustment of Conduct (TAC) which is an extrajudicial agreement made when there is the eminence or an existing action or omission that causes environmental damage before any legal measures are taken, so the polluters can regularise their conduct. The TAC can be proposed by any of the organs of the Sisnama according to the article 79-A and by any of the legitimates to present the Public Civil Action (ACP) from the law n. 7.347/1985 in Article 5, § 6.38 The ACP Law regulates actions of diverse thematic, being one of its subjects the environment, focus on finding the persons responsible for damages caused to the environment. The ACP can be proposed by the Public Ministry (state and federal), Public Defenders, all the federation members, any public organism (private or public), and associations.

3. Principles of Brazilian Environmental Legislation

The polluter pays principle is the most classic principle of environmental law, and it is charted in the Constitution at Article 225, § 3, Article 4, VIII and Law n. 6.938/81 and regulated by the law of Crimes Against the Environment. The principle instituted the responsibility of the polluter, and in Brazil this principle went further and typified it as an objective responsibility, facilitating the prosecution of the crimes committed against the environment.

The precautionary and the preventive principles39 are core for the survival of a healthy environment when well applied and enforced, they intend to act before the damage is done and before any action is taken, assessing the possible consequences of the intended action. Both work tightly with the action and risk assessment principle proposed in the Constitution of 1988, and mostly executed and enforced by the executive entities of the Sisnama.40

Public participation is a constitutional principle that calls the entire population to its responsibility for the implementation of norms and enforcement of them. Also calls the people to exercise their civilian duty to supervise, learn about and maintain the natural ecosystems and to participate in public hearings and deliberations concerning the environment.41

The sustainable development is principal and an objective at the same time addressing the need to economic return with the equilibrium between human activity and preservation of natural ecosystems and improvement of life quality of the population.42

37 Lei n. 9.605 1998, Article 72.
38 Lei n. 7.347 1985.
39 Perrez 2002, 10–12.
41 UNECE 1998.
Beside sustainable development, there is a peculiar principle of Brazilian legal structure: the social function of the property.\textsuperscript{43} That is a constitutional duty and is implemented by most of the regulations on the use of the land in rural and urban areas, establishing that the owner of land has to use it adequately, observing the legislation and preserving the environment to maintain the land as productive and within the legal reserves of natural areas.\textsuperscript{44}

Intergenerational solidarity principle, set in the Forestry Code at article 1-A, inaugurates the solidarity between generations, with a pro-future attitude and responsibilities of nowadays generations to the next to come, guaranteeing the implementation the right to a safe and clean environment for the future generations.\textsuperscript{45}

To establish the object of the environment protection comes the ubiquity principle. It serves not to deviate the attention and efforts from what wants to be protected in the Brazilian legal systems, the human right constituted by a healthy and safe environment, being these parameters for any future action.\textsuperscript{46}

The last principle is the international cooperation consolidated by the Forestry Code, and as well by the law of Crimes Against the Environment,\textsuperscript{47} it consecrates the Brazilian international and national commitment to tackle alongside the degradation of the environment and cooperate to preserve it.\textsuperscript{48}

4. Enforcement and Regulative Organs Main Structure

The Sisnama, National System of the Environment, is a system created to structure the national environmental policy, the structure has six organs: the Superior, the Advisory and Deliberative, the Central, the Executor, the Sectionals and the Locals.\textsuperscript{49} The System is a circular and integrated practices of councils to facilitated and implement measures to safeguard the equilibrium of the environment.

The Government Council will act beside the President of the Republic as “an advisor on the formulation of the national policy and the guidelines of the government for the environment and natural resources”\textsuperscript{51} and, as the name proposes it is superior to other organs. The National Environment Council (Conama) is the advisory and deliberative branch, that has a scope to propose and advise per studies the Government Council, guidelines to achieve norms and compatible patterns as ecologically balanced environment that is essential to life.\textsuperscript{52} It is composed per the advisory, studies and workgroups, technical chambers, a committee for integration of Environmental Policies and by Plenary which is integrated by the Ministry of Environment and its executive secretary, the president of Brazilian Institute of the Environment and Renewable

\textsuperscript{43} Brazil 1988, Article 186, II.
\textsuperscript{44} Silva 2014, 262–276.
\textsuperscript{45} Sands 2003, 256–257.
\textsuperscript{46} Sands 2003, 483.
\textsuperscript{47} Lei. 9.605 1998, Chapter VII.
\textsuperscript{48} Trindade 1997.
\textsuperscript{49} Decreto n. 99.274 1990, Article 3.
\textsuperscript{50} Lei n. 6938 1981, Article 6, I, free translation.
\textsuperscript{51} Ibid. Article 6, II.
Natural Resources (IBAMA), the representatives of indicated ministries, representatives of state and municipal governments, representatives of the environmental entities and enterprises entities of certain industries.\textsuperscript{53}

The Conama\textsuperscript{54} has an important role to the general regulation of the sector. It has the power to issue resolutions about criteria, patterns and technicities on environment protection and the sustainable use of the natural resources, motions and, recommendations to implementation of policies, norms and public programs on the environmental area.\textsuperscript{55} As the central organ, there is the Ministry of the Environment, late Presidency of the Republic’s Environment Secretariat, which is responsible for the implementation of environmental policies and strategies and, to give administrative support to the Conama.\textsuperscript{56}

The IBAMA\textsuperscript{57} is the executor organ, it is an independent federal autarchy, it exercises the environmental police power, executes the national environmental policies concerning the federal sphere and many other executive measures.\textsuperscript{58} At the same level as IBAMA two others can be found as insulated entities: the Chico Mendes Institute for Biodiversity Conservation (IMCBio), that has the same juridical composition as the IBAMA and is responsible for fomenting and implementing programs focusing on the protection, preservation and conservation of the biodiversity.\textsuperscript{59}

The Sectional organs are “state agencies or entities responsible for executing programs, projects and for the control and inspection of activities capable of causing environmental degradation.”\textsuperscript{60} These are federate states’ organs and usually are responsible for operating most of the inspection related to environment and the concession of licenses, excluding the ones related to national patrimony, as some bodies of water, subterranean land assets (mining) and certain federal natural reserves, that are done by federal sectional organs. The locals are municipal entities responsible for the protection of the environment and urban space and, are managed by the cities, as an example is the Municipal Councils to sustainable development.

5. Conclusion

The international attention turned to Brazil in reason of the numbers of deforestation of Amazon Forest may lead to the conclusion that Brazil has inadequate legislation on the field. Otherwise, of what can be thought, the Brazilian legislation was ahead of international efforts to preserve its native forest and biomes, which are quite diverse, before any international alliance.

\textsuperscript{53} Decreto n. 99.274 1990, Article 5.
\textsuperscript{54} Bessa 2010, 112–115.
\textsuperscript{55} Ministério do Meio Ambiente 2020.
\textsuperscript{56} Decreto n. 99.274 1990, Section IV.
\textsuperscript{57} Bessa 2010, 127.
\textsuperscript{58} Lei n. 11.516 2007, Article 5.
\textsuperscript{59} Lei n. 11.516 2007.
\textsuperscript{60} Ministério do Meio Ambiente 2020, free translation.
The international efforts to tackle climate change started actually in Rio de Janeiro, southeast of Brazil\(^{61}\), far off from Amazon region, where was decided what the term ‘climate change’ means centring the subject of the change on human action. Another international alliance was the Kyoto Protocol discussing the carbon emissions and its danger, leading the European Union to set a new principle within their borders, the solidarity.\(^{62}\)

Apart from the international determination to deal with climate change and its consequences, Brazil had already a dense frame of laws and regulations, leading back to Colonial times.\(^{63}\) By 1965\(^{64}\) Brazil already had an Environment codex limiting the use of land, and protection natural areas and creating the APP (Areas of permanent protection) and the National Environment Policy still in use is dated from 1981.

Unfortunately, well-structured legislation is not enough to ensure good enforcement of it,\(^{65}\) that is the area that Brazil has difficulties. Many factors corroborate to the result, as one, the size of its territory leads to the necessity of a big structure not only bureaucratic but of policing of protected areas and borders with other countries.

The size of the bureaucratic machine leads to more troubles related to the control of inspectors, controllers, politicians and polluters, which can culminate in corruption that hardly can be addressed. Explaining the creation of laws and organs that help to inspect who is inspecting, an example of the Public Civil Action law\(^{66}\) and to address the polluters and public agents, a law that instituted more incisive sanctions and penalties to harmful actions against the environment was promulgated.\(^{67}\) Although all the efforts, the negative attention is always attracted to the bad practices, as the large properties with its monocultures, which impoverish the soil and the illegal mining that opens and pollutes forestry regions are at large in Brazil. These practices tend to obscure the good practices in the territory, that try to overcome political and legislative barriers and implement sustainable developing practices which ensures the economical return expected by the land owners but as well the consecration of natural ecosystems. As examples, can be quote the REM program cited previously, the organic creation of cattle, the agroforestry and many other practices that include preservation and production at the same time.

From this analysis, it is possible to conclude that the Brazilian environmental system for protection was well established and is severe when dealing with polluters and protection of the natural environment.\(^{68}\) And will only not fulfil its purpose, if misguided political strategies start emptying the power of the organs, nullifying the outstanding efforts of them to ensure that best practices are put to use.

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\(^{62}\) Ibid. 155–156.
\(^{63}\) Lei n. 601 1850.
\(^{64}\) Lei n. 4771 1965.
\(^{65}\) UNEP 2019.
\(^{66}\) Lei n. 7.347 1985.
\(^{67}\) Lei n. 9.605 1998.
\(^{68}\) Chiavari & Lopes 2017, 18.
The solution to the main problems of current Brazilian scenario regarding environment protection is the fortification of these systems, providing the necessary tools for the purpose as well as a shift on the political understanding of Brazilian position in the international scenario, demystifying the aura where the developed countries built their wealth on, that revenues are only achieved by degradation of the environment.
Bibliography


