

# Sustainability in focus: From management to environmental legislation in Brazil

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#### ABSTRACT

The present work aims to analyze the management and its environmental dimension through the premises of sustainability, bringing in this context the importance of legislation relevant to the environment. Thus showing that the legal frameworks referring to the place where life develops in the territory are supported by the Federal Constitution and other various legislations. This research was built from bibliographic studies and documentary analysis in works by the main authors on the relationship managementsustainability-legislation, under a complex view. In this way, a more detailed analysis of the subject is produced, in the search for an understanding of this showing importance of relationship, the environmental licensing in Brazil.

Keywords: Environmental Management, Sustainability, Environmental Licensing.

### **1 INTRODUCTION**

The globalized system, in the face of the use of new technologies, stimulates the accelerated use of natural resources, making them almost unsustainable, this causes more and more the urgent need to review the relationship between man and nature, so that this imbalance does not endanger life on the planet. It is very important to build new models and new attitudes in the interaction with the environment.

This discussion has been taking place since the ecological movement, in the 60s, with the questioning of the present conditions of life. During this period, several topics were raised, such as: species extinction, deforestation, pesticide use, rampant urbanization, population explosion, air and water pollution, food contamination, soil erosion, reduction of arable land due to the construction of



large dams, nuclear threat, bacteriological warfare, arms race, technologies that affirm the concentration of power, among others. (GONÇALVES, 1990).

The existing concern at the global level gained strength from the report "Limits to Growth" in 1972, prepared by the Club of Rome[1] which exposed the first scientific studies on the importance of environmental preservation. It presented four issues in the search for balance, namely: population growth control; control of industrial growth; insufficient food production; and depletion of natural resources. (PIGA; MANSANO, 2015).

In the same year, 1972, in the city of Stockholm, Sweden, the United Nations Conference on the Human Environment took place, based on the report of the Club of Rome, with the aim of promoting governmental actions and international organizations for the pursuit of sustainable development. From this conference, the United Nations Environment Programme (UNEP) was created, and principles emerged from it that represented commitments among the nations present, including Brazil. (PIGA; MANSANO, 2015).

After these events, Brazil began an internal construction, based on social movements, in addition to international pressures, of actions aimed at environmental demands, in view of biodiversity and the richness of natural resources existing in the territory. At this juncture, the Special Secretariat for the Environment (SEMA) was created by Decree No. 73,030/1973, initiating the treatment of environmental issues in the country.

From this perspective, this study aims to identify the effectiveness of environmental management in Brazil, based on its legal framework, federal law 6.938. The methodology used followed a qualitative approach, through a bibliographic study. This article is organized into five stages, the present introduction; the second deals with management and its environmental dimension for the pursuit of sustainability; the third shows important aspects about the evolution of environmental legislation in Brazil; the fourth addresses the importance of environmental licensing; and in the final stage, the considerations on the subject are presented.

## **2 THEORETICAL FRAMEWORK**

# 2.1 MANAGEMENT AND ITS ENVIRONMENTAL DIMENSION FOR THE PURSUIT OF SUSTAINABILITY

In the period from 1968 to 1973, during the military regime, Brazil experienced a great acceleration of growth known as the "economic miracle", which considerably raised the rates of its Gross Domestic Product (GDP), led by the durable consumer goods sector and, to a lesser extent, by the capital goods sector, with a large drop in inflation. This period was also marked by the large influx of foreign capital into the country. However, the measures adopted brought consequences such as monetary correction, with its perverse effects on price dynamics; the increase in the country's external



dependence, in two sectors: industrial (capital goods, oil and derivatives) and financial, reflecting the debt policy; problems that were heightened by the oil price shock at the end of 1973. (GIAMBIAGI et al., 2011)

After the acceleration, the Brazilian economy went through a great decline, the authoritarian regime began to be questioned, initiating the search for the redemocratization of the country, the period of 1974-84 was marked by the exhaustion of the current political and economic model, these consequences characterized the 80s as the "lost decade". At this moment, 20 years after the military regime, the process for direct elections took place in 1984, establishing structural changes in the country's political and economic scenario. (GIAMBIAGI et al.., 2011)

The different moments of ups and downs in the policy and economic plans adopted brought a lot of instability to the country, the attempts to overcome underdevelopment ended up attracting foreign capital, generating more exploitation of natural resources and little response to social inequalities. However, the country began to rethink the forms of management, considering the internal demands, as well as the external pressures, between advances and setbacks, environmental issues began to be incorporated.

In this context, SEMA had already been created by Decree No. 73,030/1973, but the needs for environmental demands continued to grow in the territory. However, in the midst of the political effervescence in the country, one of the most relevant facts that deserves to be highlighted is the implementation of the legal framework that established the National Environmental Policy – PNMA, Law No. 6,938/1981, which enabled the creation of the National Environmental System – SISNAMA and established the principles and guidelines, instruments and attributions for the various entities of the federation that act in the national environmental policy. (GANEM, 2013).

Brazilian environmental legislation was beginning to be developed, strengthened by the promulgation of the Federal Constitution of 1988, known as the Green Constitution, which inaugurated the definitive rupture with the military regime and a new process of construction of the Democratic State. Thus, it brought article 225 that deals specifically with the environment, as well as several provisions.

In 1989, there was the integration of the environmental policy bodies, which until then had been carried out separately in the fisheries (Superintendence of Fisheries Development - SUDEPE), forestry (Brazilian Institute of Forest Development - IBDF), and rubber (SUDHEVEA) policies. Then, the Brazilian Institute of the Environment and Renewable Natural Resources (IBAMA) was created, Law No. 7,735/89, the body that executes environmental policy, subordinated to SEMA and the Ministry of the Environment (MMA). (PIGA; MANSANO, 2015).

While in Brazil, the legal norms began to protect the environment, allowing the construction of a new branch of Law, which is the "Environmental Law", supported by the Constitution, whose



prerogative was the right to a healthy environment. In the rest of the world, new debates were taking place, with the "Montreal Protocol" in 1987, which bans harmful chemicals (chlorofluorocarbons or CFCs) and sets deadlines for this substitution; and the "Report of the World Commission on Environment and Development", known as the "Brundtland Report", alluding to the name of its coordinator, but with the title "Our Common Future", which disseminated the concept of Sustainable Development (SD) to the world. (NASCIMENTO, 2016).

The concept of SD has become a maxim all over the world, being "development that meets the needs of the present without compromising the ability of future generations to meet their own needs". In this way, environmental issues and their interconnection with economic development have become a warning for degradation at the planetary level, due to the exaggerated process of consumption and use of non-renewable natural resources. (NASCIMENTO, 2016).

According to Nascimento (2016), although the concept of SD was previously presented, it only gained strength on the occasion of the World Conference on Development and Environment, held in Rio de Janeiro, in 1992, an event known as the ECO-92 Summit Conference of the United Nations – UN. It was from this that society in general and companies in particular, began to understand the need to implement a new vision of economic development, so that it could guarantee the production of goods and services and, at the same time, meet the basic needs of human beings, in addition to preserving their environment. Thus, the concept of SD is composed of three dimensions: economic, social and environmental.

The environmental dimension has become a necessity of public and private management, and it has become urgent to search for new development alternatives with lower environmental impacts, with a view to reconciling economic growth and environmental conservation. In other words, previously, economic development occurred without taking into account the destruction it could be causing to the environment, or to society itself, the relationship between man and nature was unlinked in its political and social practice, which generated an environmental crisis, but now it was necessary to build a new way of looking at the world, through a new paradigm of sustainability.

According to Leff (2003), the lack of sustainability is the hallmark of an epoch's crisis, so it is necessary to identify its origin and make a projection for a possible sustainable future. This search requires the construction of an alternative rationality, outside the worldview of current unsustainability, this is the great challenge, the environmental problem is more than an ecological crisis, it is a questioning of thought and understanding, it talks about the model of Western civilization and its vision of nature.



# 2.2 IMPORTANT ASPECTS ABOUT THE EVOLUTION OF ENVIRONMENTAL LEGISLATION IN BRAZIL

With a view to a development model focused on environmental preservation, environmental legislation has been used as an important tool to foster a new vision of interaction with the environment. The need to implement environmental management requires a legal basis, which began to be substantiated with the implementation of Law No. 6,938/1981, an important legal framework for the PNMA in the country.

In the period from 1981 to 1989, the Evolution of Environmental Law in Brazil took place, the environmental legislation went through a process of significant changes for environmental protection. The Constitution of 1988, in its article 225, treats the environment as a good of collective use common to all, in a specific chapter (chapter VI), it was reinforced that it is the duty of each one to do their part to protect natural resources for present and future generations. (BORGES; REZENDE; PEREIRA, 2009).

According to Magalhães (2002), it was at the United Nations Conference on the Environment – UNCED, Rio-92, that environmental sustainability gained greater notoriety and established a proposal for the coming years, called Agenda 21. This document seeks to ensure universal access to basic education, as recommended by the Conference on Environmental Education (Tbilisi, 1977). The event also contributed to the improvement of environmental legislation in Brazil, since it brought together 80% of the world's countries to pursue the same goal: the defense of the environment. The following are important recommendations from this meeting.

The main recommendations for environmental protection of humanity and the three main documents produced at this event were: Convention on Biodiversity, a document in which the signatory countries commit to protect the existing biological wealth, 112 countries signed the document; Climate Convention, where 152 countries signed the document and committed to preserving the atmospheric balance using clean technologies. This Convention enacted the commitment to control the emission of CO<sup>2</sup> into the atmosphere; Agenda 21 – It is an action plan that serves as a guide for international cooperation. Adoption of common procedures in various areas, such as: water resources, toxic waste, degradation of soil, air, forests, transfers of resources and technology to poor countries, quality of life of peoples, legal issues, indigenous peoples, women and youth. (UNAMAZ, 1998).

According to Machado (2004), still in 1992, recognizing that the environment needed to be prioritized, the Brazilian government created the Ministry of the Environment, Water Resources and the Legal Amazon - MMARHAL, Law No. 8,490/92. However, in 1999, by Decree No. 2,972, there was a ministerial restructuring and it was renamed the Ministry of the Environment - MMA, the central body of the National Environmental System - SISNAMA.



Federal Law No. 6,938/81, which served as the basis for the origin of the National Environmental System - SISNAMA, through the National Environmental Policy, brought the most important principles of this policy; Among these, the following can be mentioned: the maintenance of ecological balance, the supervision of the use of environmental resources, the recovery of degraded areas and the control of potentially polluting activities. The organization of SISNAMA encompasses the direct administration bodies that are responsible for the protection, improvement and recovery of environmental quality.

SISNAMA acts through the coordinated articulation of the organs and entities that are part of its constitution, observing the access of public opinion to information about aggressions suffered by the environment and to the actions taken for its preservation, in the manner established by the National Council for the Environment - CONAMA. This is a consultative and deliberative body, established by Law 6.938/81, which differentiates and establishes environmental licenses, in its Art. 1 is the resolution for I- Environmental Licensing; II- Environmental License; III- Environmental Studies; and III- Regional Environmental Impact. (SANCHES; MELO; SILVA; CALEMAN, 2017).

In order to better characterize the period of improvement of Environmental Law in Brazil since the enactment of the 1988 Constitution, the main legislations that protect the environment are the following: (BRASIL, 2009).

Environmental Crimes Law - Law No. 9605/98; Created on February 12, 1998, it establishes the practice of environmental degradation as a crime.

The National Water Resources Policy – PNRH, Law No. 9,433/97, created on January 8, 997, became known as the Water Law, established instruments for the management of water resources in the federal domain and created the National Water Resources Management System – SINGREH.

National Water Agency – ANA, Law No. 9.984/00, created on July 17, 2000, responsible for the execution of the National Water Resources Policy, is an autarchy under a special regime, with administrative and financial autonomy, linked to the MMA, its main competence is to implement the management of water resources in the country.

National System of Nature Conservation Units – SNUC, Law No. 9,985/00 created on July 18, 2000, created to consolidate the creation of biodiversity protection areas, mentioned in the Forest Code, in the PNMA. The SNUC is made up of the set of federal, state and municipal conservation units, to establish criteria and standards for the creation and management of conservation units.

The Environmental Crimes Act improved legislation on the issue of penalties against those who use natural resources unsustainably. Crimes against the environment were considered only criminal misdemeanors, the penalties were considered insignificant in the face of the degradation they caused, but any damage or loss caused to the elements that make up the environment, protected by legislation, became considered environmental crimes. (BRAZIL, 2009).



According to IBAMA (2021), the law is not only about severe punishments. The Law must incorporate methods and possibilities for the non-application of penalties, provided that the offender recovers the damage, or otherwise pays his debt to society. A law is only efficient if it can be efficiently applied and enforced. The Environmental Crimes Law needs to be better publicized and correlated with the Federal Constitution of 1998, which deals with the environment common to all and it is the duty of each citizen to protect the environment. However, it is necessary for society to participate in the form of complaints about the misuse of natural resources, as it is the duty of the public authorities and the community to defend and preserve the environment for present and future generations. (BORGES; REZENDE; PEREIRA, 2009).

# 2.3 THE IMPORTANCE OF ENVIRONMENTAL LICENSING IN BRAZIL

Environmental Licensing (L.A) is characterized by being an administrative procedure that, through a prior evaluation of projects or activities, through the government or private individuals, with their installation, operation or even expansion, may cause some damage to the environment. In this context, its contribution is extremely important for environmental prevention and control, enabling economic development to proceed along with the protection of the environment, so that we have growth with sustainability, that is, economic efficiency in harmony with social equality and environmental quality.

According to DA SILVA, R.C and PADULA, R.C (2005) There are three stages of a typical environmental licensing process. In the first of these, a prior license (LP) is requested. This license must be requested in the preliminary planning phase of the project, since it approves its location, its conception and attests to its environmental viability. Depending on the characteristics of the project, it may be required, for its concession, to carry out environmental studies complementary to those that may already be presented. Once this phase is successfully completed, the preliminary license is issued. This license contains the conditions to be met by the project, including the quality of the gaseous and liquid effluents. Once this stage is completed, the entrepreneur applies for the installation license (L.I), presenting the construction project for analysis. The responsible body analyzes and, once all pending issues have been resolved, issues the license. Once the approved facilities are built, the operating license (L.O.) is requested, which is issued after any adjustments may be necessary in the pre-operation of the facilities.

Within the environmental policy is the Environmental Impact Assessment (EIA), which is an instrument of the National Environmental Policy (PNMA), of great importance for the institutional management of plans, programs and projects, at the federal, state and municipal levels, allowing society and the State to scale development actions and proposals, before they occur. taking into account environmental and socio-economic issues. Thus, in the evaluation, not only the



technical/environmental side should be considered, but also the opinion of various social groups, which are directly or indirectly involved in the process. The evaluation includes the phases of Environmental Impact Studies (EIA), Environmental Impact Report (EIR), public hearing and decision of the environmental agency, aimed at making a systematic examination of the environmental consequences of the proposed actions (projects, plans, program and policies) (FERREIRA, 2000).

Instruments of National Policy, the Environment instituted by CONAMA Resolution No. 001/86, of 01/23/1986; the Environmental Impact Assessment (EIA); and its corresponding Environmental Impact Report (EIR) are used when they are considered to have significant potential for degradation or pollution and, therefore, will depend on the Preliminary Environmental Impact Study. The EIA is the execution, by a multidisciplinary team, of the technical and scientific tasks aimed at systematically analyzing the consequences of the implementation of a project/enterprise on the environment. The RIMA is the document that is presented, in which the results of the technical and scientific studies of environmental impact assessment are constituting a document of the environmental impact assessment process.

## **3 CONCLUSION**

Knowing the steps that started the creation of environmental impact assessment tools in Brazil and their applications, it is observed that such instruments that govern environmental planning, when they undergo evolutions in their methods and techniques, carry with them the importance of making the environmental licensing process increasingly judicious. Thus showing that when dealing with sustainability, one must necessarily refer to an interrelationship between social justice, quality of life and environmental balance.

The different historical, political and economic moments directly affected the process of construction of Brazilian environmental legislation and the consolidation of practices aimed at preserving the environment. However, the beginning of its implementation through the so-called Green Constitution was a legal milestone for the construction of actions aimed at sustainable development in the country.

It is noteworthy that the Federal Constitution/88 – Magna Law – was the main term of consolidation of "Environmental Law" in the Brazilian territory, since it began to deal specifically with environmental issues, a fact that had not occurred in any of the seven previous Constitutions.

In the case of legal frameworks in Brazil after the Magna Law, the implementation of the Environmental Crimes Law - Law No. 9605/98, National Water Resources Policy - PNRH, Law No. 9,433/97, National Water Agency - ANA, Law No. 9,984/00 and National System of Nature Conservation Units - SNUC, Law No. 9,985/00. Relying on good laws, we have the starting point for establishing conditions that enable its operation at the time of practice.



It was found that it is part of the competent bodies to define the technical studies necessary for licensing, the most aggravating problems when it comes to the EIA/RIMA occur in the phases of environmental diagnosis and impact analysis, and major problems are not related in the preparation of environmental management plans and programs.

In view of the above, it is possible to highlight that any entity of the direct organization, which has an interest in maintaining the quantitative and qualitative perspectives of its services and products related to the environment, must constantly undergo adjustments so that they are always in accordance with the existing environmental legislation.



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