

RIGHTS AND ACCESSIBILITY OF WATER APPLICABLE TO TERRITORY GOVERNANCE IN BRAZIL

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ABSTRACT

Although Brazil has almost 15% of the world's freshwater volume, its insufficiency is due to severe climate change in recent years, and has provoked a debate on water resources, which in turn need to be managed in a country defined as 'rich in water'. As an effective force for sustainability, local, regional, national and global monitoring and management is essential to make the best use of available water today and in the future. This debate focuses in particular on the accessibility of water as a system of sustainable governance over time, welcoming the equal distribution of water and the right to water for the different regions of the country. The governance of water resources in Brazil is under the responsibility of the federated entities, by which they represent unequal societies and river basins. Considering that the elements that cause inequalities are territorial, it needs coordination that seeks solutions to water, now too much, now in scarcity, and now polluted. In the demographic perspective, they reflect the characteristics intrinsic to the local dynamics, diversities in access, which includes basic sanitation and the concentration of the deficit in certain population groups, whose priority is to make management decisions at administrative levels that are reciprocally compatible and effective. Therefore, it should be noted that governance for water allocation in an equitable manner is closely linked to a decentralized regime without the strengthening of competence at the subnational level. In its multiple approaches, it instrumentalizes the inefficiency of physical, economic accessibility, quantity and water quality for the Brazilian society in its majority. This condition results from exogenous, socioeconomic, demographic and cultural aspects, stemming from the continuous presence of water market treatment, lack of strategic planning and management, and the many existing challenges to ensure adequate access.

Keywords: merchandize, right to water, scarcity.

1 INTRODUCTION

Brazil has about 15% of the world's freshwater volume. But with severe climate change, in recent years it has sparked a debate about how water resources can be effectively managed in a 'water-rich' country. Governance of Water Resources in Brazil focuses primarily on more sustainable and inclusive water policies. However, water allocation regimes are unequal, and in order to manage the impasses the system seeks to reconcile with state and federal priorities.

As a reflection of the country's culture, legal regime, political system and territorial organization water governance is complex, and of importance to all sectors. Access to water is, for many people, a matter of daily survival or can help break the vicious circle of poverty. Refers to the political, social, economic and administrative systems that influence the use and management of water. Essentially, who gets the water, when and how and who has the right to water and related services and its benefits. It determines equity and efficiency in the allocation and distribution of water resources and services and balances the use of water between socio-economic activities and ecosystems [1].

The subsequent adoption of water resources laws by the Brazilian State and the creation of a variety of institutions, including river basin committees and agencies, state and national water councils, undoubtedly collaborated to strengthen a necessary policy framework for the water sector [2]. This debate focuses in particular on the accessibility of water as a system of sustainable governance over time, welcoming the equal distribution of water and the right to

water for the different regions of the country. The governance of water resources in Brazil is under the responsibility of the federated entities, by which they represent unequal societies and river basins. Considering that the elements that cause inequalities are territorial, it needs coordination that seeks solutions to water, now too much, now in scarcity, and now polluted.

2 COMPOSING THE SCENARIO: WATER A LIMITING FACTOR FOR DEVELOPMENT IN BRAZIL

As an indispensable resource for terrestrial life, water is found on the planet in different physical proportions and stays, about 1,500 million cubic kilometres. Of these 97% of the water is in the biosphere and it is salty, while 2.25% constitute polar ice caps and glaciers, and only 0.72% of fresh water, remaining 0.03% in the atmosphere. Importantly, only 0.72% of the existing water is directly available for human consumption, in rivers and lakes. The free supply of natural resources by nature and the belief of its unlimited capacity to recover from exploratory actions contributed to this posture that was not committed to protection and ecological balance [3]. It is necessary that this interrelation be assimilated and internalized in the daily practice of each citizen [4].

It is estimated that currently, in the world, 1.7 million people suffer from water scarcity. This difficulty may also be associated with qualitative factors, caused, for example, by the inadequate disposal of solid wastes, commonly called garbage. The impairment of water quality may make it unfeasible to use or render impracticable treatment, both in technical and financial terms. There are several toxic substances generated in different human activities. The profound changes made in the environmental field led the companies to develop management policies, especially regarding water and its use, water supply and sewage services, sanitation, physical-chemical treatment in the water supply, public health by consolidating the modernization of [5].

However, its use and management reiterate the flaws that lead to surface water degradation, requiring rationality actions, as important in resource allocation as in equity, which is often crucial in governance decisions [6]. In order to understand water resources management policies, it is essential to understand the structure and actual sequencing, analysing the factors or attributes that make water management, seen beyond scarcity, result from a combination of inaccuracies in governance, environmental preservation, sustainability and disparity in access to water [3].

Although the degradation of natural resources has intensified since the industrial revolution and consequent improvement of the production methods in the various sectors of the economy, it is pointed out that the misuse or passivity in relation to the environmental degradation in Brazil goes back to the discovery. The legal evolution of the protection of natural resources and in particular of water resources in Brazil is evidenced in three distinct moments ranging from 1,500, with the arrival of the Portuguese in Brazil until the phase in the implementation of the National Policy of Water Resources enshrined in Law 9.433/97. Although the historical facts regarding the protection of water resources have not been chronologically documented, in general terms, this evolution has accompanied the development of Brazilian society from the colonial, imperial, republican period to the present day [5].

In this argument, it is highlighted that the consequent exploitation of the different natural resources allied to the growth and concentration of the populations in the provinces, left the vestiges for the absence of a system of management of the water resources. Although reports indicate that 'to live in the little known stops of colonial Brazil, the indigenous customs were primordial to the colonizers who needed to find the so important' gullies '[...]' [6].

Later on, from the discussions around the preservation of natural resources and the construction of the notion of sustainable development, the need for practices that ensure the sustainability of the natural 'water' resource became more widely discussed. The landmark of concern about the preservation of natural resources was the Stockholm Conference (1972) which recorded the beginning of the political system's concern with ecological issues. In this decade we have witnessed the emergence and expansion of state environmental agencies, as well as the United Nations Environment Program, and in the following decade, green parties have already played an important role in the institutionalization of environmental issues [7].

With regard to water management specifically, we can highlight the United Nations Conference on Water held in Mar del Plata, Uruguay, in 1977, which laid the groundwork for the international community's position on water resources due to pollution and for the impending shortage. In Brazil, Law 6.938, dated 08.08.1981, which disciplined the National Environmental Policy and instituted the National Environmental System – SISNAMA, made up of federal, state and municipal bodies responsible for environmental protection. The highest body of this System is the National Council for the Environment – CONAMA, which, among other duties, is responsible for 'establishing standards, criteria and standards related to the control and maintenance of the quality of the environment with a view to the rational use of environmental resources, especially water'. In the exercise of its competence, CONAMA issued Resolution 020, of June 18, 1986, which inaugurated, at the national level, the management of water quality [8].

CONAMA Resolution 20/1986, recently revoked by the 357 of March 17, 2005; the latter deals with the classification of waters according to their uses and respective quality standards. The CONAMA Resolution 357/2005 classifies the fresh, brackish and saline waters in the national territory, defining the quality standards of each of these classes according to their prevailing uses. The framing of water bodies in these classes is done at the levels of quality that they should have to guarantee the intended uses, which requires goal control in order to gradually achieve the objectives of the framework. The uses defined in this Resolution do not cover all possible uses of water, but only specific uses, which require water of a certain quality [9]. However, for a long time, Resolution 20/1986 was the legal instrument used to discipline the dynamics of water use until the enactment of Law 9.433 of 8 January 1997, which established the National Water Resources Policy [10].

With the construction of the concept of Sustainable Development from the Brundtland Report, which discussed the model of economic development based only on the accumulation of capital to the detriment of the environment and contained the development model to be adopted defining it as 'the one that meets needs without compromising the ability of future generations to meet their own needs'. With the Federal Constitution of 1988 all the waters became public since natural resources are public goods of common use of the people, including the subterranean, no longer existing common or private waters. Thus, former owners of wells, lakes or any other body of water became mere holders of rights to use water resources if they obtain the necessary grant provided by law [11].

The Federal Constitution divided water resources management with the division of water domains between the Union, the States and the Federal District, leaving the competence to legislate under the exclusive control of the Union. The 1988 Constitution also foresaw in its article 21, XIX the creation of the National System of Management of Water Resources – SINGREH. In 1991, SINGREH underwent a regulatory process with the referral to the National Congress of a bill on the National Water Resources Policy and the National System

for Water Resources Management – SINGREH. The Federal Constitution establishes in its art. 22, item IV, which would be the sole responsibility of the Union to legislate on water, defined that only the federal legislature should lay the foundations for the management of water resources. Thus, only management is decentralized and not the competence to legislate, which remains centralized and in the hands of the Union. According to art. 22, sole paragraph, only the enactment of a supplementary law may authorize States to legislate on water resources [12].

One outstanding aspect is the fact that although the Federal Constitution considers the multiple uses of water, there remains a concern with the energy use of water resources, since art. 20, first paragraph of that law provides that ‘the participation of water resources ... shall be assured, in accordance with the law, to the States, the Federal District and Municipalities, as well as organs of the direct administration of the Union’. Other legal devices such as art. 21, XII, item ‘b’ of the Federal Constitution, also demonstrate the concern with the energy exploitation of resources, leaving a little aside the priority that must revolve around the adequate management with a view to pursuing sustainable development [13].

In June 1992 ECO-92 took place when Agenda 21 was adopted, an international document consisting of a program of action in terms of the preservation of natural resources, but without the force of a mandatory international standard, which established that each country should commit itself to reflect, globally and locally, on how government, business, non-governmental organizations and civil society could cooperate in finding solutions to socio-environmental problems. Regarding water resources, the Brazilian Agenda 21 devoted its Chapter 18 to ‘Protection of Water Resources Quality and Supply: Application of Integrated Criteria in the Development, Management and Use of Water Resources’. It was the first step in the management of water resources in Brazil. With the enactment of Law No. 9433, in January 1997, establishing the National Policy for Water Resources and creating SINGREH, item XIX of art. 21 of the Federal Constitution. It should be noted that on this occasion, as most state water policies preceded national policy, this was merely a reflection of what many States had already disciplined [14].

As part of the regulations required to implement the National Water Resources Policy, Law 9.984, dated 17.07.2000, was promulgated, which created the National Water Agency – ANA, as a federal entity for the implementation of the National Water Resources Policy and a member of the Water System National Water Resources. And, in turn, Decree 3.692, dated 12.19.2000, which contemplates the organizational and operational structure of ANA. In February 2002, during the II World Social Forum, the seminar ‘A Sustainable World Is Possible’ was held in Porto Alegre, Brazil, and also discussed issues that are essential for the protection of water resources. In April 2002 the ‘Dialogue between Decision-makers on Sustainable Water Management – priorities for political structures and best practices’ took place in Switzerland [15].

In the latter, proposals were presented by participating non-governmental organizations with a focus on the hydrographic basin and the protection of water resources and their access to the most needy populations in view of the fact that access to water is a fundamental right of the human being. The Water Code was the first document to specifically address the protection of water quality in Brazil [16]. Water resources management is one of the biggest global challenges due to its limitation, regional disparities in water supply and flow, increased global water demand, aquifer depletion and water stress induced by pollution and climate change.

3 SUSTAINABILITY AND GOVERNANCE OF WATER

The structural change identified in the last decades refers to a set of adjusted aspects, involving both the forms of production and management, the nature and role of the State, and new parameters of articulation and organization. Development is associated with countries that choose prosperity when they organize their policies, laws and institutions on the basis of productivity and diversification, when they upgrade the skills of their citizens and invest in the types of specialized infrastructure that enable trade efficiency [17].

Recognition of water vulnerability confers the need for interpretation and implementation of local environmental protection and sustainability is a political issue. Important factors influencing local sustainability performance, particularly in the protection of water resources, include the level of institutional capacity of cities and municipalities; resources; the presence of individuals committed to processes that improve local policy and sustainability programs. The whole country needs to determine for itself how best to approach the preparation and implementation of its national water sustainability strategy, depending on prevailing historical, political and cultural circumstances. Regional development in the current context is at a critical juncture with multiple crises (financial, food and energy), forcing us to re-evaluate the economic paradigm to better meet the unfulfilled promises that will be left to future generations in the areas of employment, social progress, quality of life, respect for nature and the accessibility and availability of drinking water [18].

Due to the overlapping of multifaceted contents of the components of the complicated economy-environment-society system, the regional system is a complex multi-level, multifunctional and dynamic system that encompasses economic structure, social structure and natural structure. There is no doubt about the importance of integrating the pillars of sustainable development at the regional level, and the implementation of this concept has proved to be a challenge in practice. In fact, the integration of the environmental, economic and social dimensions of sustainable development at the regional level implies the implementation of complementary and coordinated actions in different areas that result in economic growth, to achieve social objectives without compromising the planet's rare resources. In this theme, water should be understood as a human right of access [19].

It involves solutions to improve human well-being that do not result in degradation of the environment or immersion in the well-being of others. It is involved in sustainable measures and understanding of the interconnections between economy, society and the environment; living within certain limits of the earth's ability to maintain life; and maintain resources and opportunities for this generation and the next. And this must be glimpsed by the community as a whole, composed of three concentric circles: economics is found within society, and both economics and society exist within the environment [5].

In the broader context of environmental issues, the problem of the preservation of water resources currently takes on a preponderant role. Essential to the cycle of nature and human activities, water enters this millennium as a factor that will be at the centre of environmental discussions around the world. The most serious problems affecting water quality in rivers and lakes are, in varying order of importance, depending on the different situations, inadequate treatment of domestic sewage, inadequate controls on industrial effluents, loss and destruction of catchment basins, the erroneous location of industrial units, deforestation, uncontrolled migratory agriculture and poor agricultural practices [6].

The understanding of the natural resource water as an economic and finite good must cause all actors to use it in a way that maximizes social well-being, either producing with maximum

efficiency or consuming without waste. The planet Earth is finite; and, in this sense, there are limitations to population growth, especially at the current rate, of more than 1.5% per annum (representing almost 100 million people every year) [13]. It is necessary to evolve beyond legislation, seeking local management models that address the sustainability not only of the national system, but also of water resources and natural resources as a whole, involving the whole environment of which man is also integral, considering the environmental, political and socioeconomic sustainability of each site.

4 FINAL CONSIDERATIONS

Water is a central and irreplaceable element for various human activities and for the survival of species of fauna and flora. The recognition of this importance has caused the intervention of the governments in the water management, through the adoption of public policies. Understanding a water policy often requires understanding how management, defined by a set of actions, decisions and resource allocations, implies measurable outcomes and impacts on society, the economy and ecosystems.

On the other hand, various policies and actions of society and the private sector have the potential to interfere both in the quality and availability of water, requiring those responsible for management to plan and take corrective actions to repair damages. The major challenge of sustainable development is to reconcile analysis with synthesis, that is, to build sustainable development together with the choice of indicators that show this trend, especially issues related to water resources.

REFERENCES

- [1] Bossel, H., *Indicators for sustainable development: theory, method, applications – a report to the Balaton Group*, International Institute for Sustainable Development: Manitoba, pp. 64, 1999.
- [2] Canter, L. W., *Environmental Impact Assessment*, Irwin MacGraw-Hill: Boston, **485**, pp. 109, 1996.
- [3] Pereira, A. O. K., Calgaro, C., & Pereira, H. M. K., *Relações de Consumo, Globalização*. Caxias do Sul, RS: Educs, pp. 109, 2016.
- [4] Ait-Kadi, M., Water for development and development for water: realizing the sustainable development goals (SDGs) vision. *Aquatic Procedia*, **6**, pp. 106–110, pp. 108, 2016.
- [5] Damasceno, S. M. B & et al. Sustentabilidade no foco da inovação. *Revista Gestão Industrial, Ponta Grossa, Paraná*, **07(03)**, pp. 120–134, pp. 125, 2011.
- [6] Freitas, J., *Sustentabilidade, Direito ao Futuro*. Belo Horizonte, Fórum, p.8, 2012.
- [7] Santos, M., Técnica, espaço, tempo: globalização e meio técnico-científico-informacional. Editora da Universidade de São Paulo: São Paulo, pp. 18, 2008.
- [8] Leff, E., Saber ambiental: sustentabilidade, racionalidade, complexidade, poder. Tradução de Lúcia Mathilde Endlich Orth. 9. ed. Vozes: Petrópolis, pp. 38, 2012.
- [9] BragaeSousa,W.L.&Neemias,M.Águaeodesenvolvimentosustentável.,2013.Disponível em: <<http://catolicadeanapolis.edu.br/revmagistro/wp-content/uploads/2013/05/1-C3%81GUA-E-O-DESENVOLVIMENTO-SUSTENT%C3%81VEL.pdf>>. Acesso em: 14 abr. 2019.
- [10] Cesario, S. K., Sustainable Development Goals for monitoring action to improve global health. *Nursing for Women's Health*, **20**, pp. 427–431, pp. 42, 2016.

- [11] Dedecca, C. S., *A redução da desigualdade e seus desafios*. IPEA: Rio de Janeiro, pp. 55, 2015.
- [12] Novaes, W., *A década do impasse: da Rio-92 à Rio+10*. Estação Liberdade: São Paulo, pp. 11, 2002.
- [13] Brasil, *Constituição Federal da República 1988*. Presidência da República: Casa Civil. Brasília, 1988.
- [14] Jacobi, P. R., Fracalanza, A. P. & Silva-Sánchez, S., Governança da água e inovação na política de recuperação de recursos hídricos na cidade de São Paulo. *Cadernos Metrópole*, 17(33), pp. 61–81, pp. 65, 2015.
- [15] Cordeiro Netto O. M., Recursos hídricos: gestão de conflitos. In: Nascimento E.P. & Viana J. N. S. (orgs.). *Economia, Meio Ambiente e Comunicação*. Rio de Janeiro: Garamond, pp. 64, 2006.
- [16] Oecd, *Governança dos Recursos Hídricos no Brasil*. OECD Publishing: Paris, France, p. 11–12, 2015.
- [17] Portilho, F., *Sustentabilidade ambiental, consumo e cidadania*. Ed. Cortez: São Paulo, pp. 31, 2010.
- [18] Pinto, M. de R. & Batinga, G. L., O consumo Consciente no contexto do consumismo moderno: algumas reflexões. *Revista Gestão Org, Brasília*, 14(1), pp. 30–43, 2016.
- [19] Neutzling, I. (org.), *Água: bem público universal*. UNISINOS: São Leopoldo, p. 11, 2004.