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The Right to Water and Hydric Injustice: A Study on the (Un)Constitutionality of Tax Benefits to the Hydro-Intensive Industrial and Port Complex of Pecém-Ceará

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Abstract

The present work seeks to examine the compatibility of the instruments of taxation and tariff applied to the companies that compose the Industrial and Port Complex of Pecém, in order to analyze their compatibility with the Brazilian legal system, thus confirming their (in)constitutionality. Since the water crisis is a worldwide reality, especially for the semi-arid state of Ceará, water management is of extreme importance, with taxes being a tool for this, and its misuse can cause a real water injustice. In order to advance in this research, we carried out a comprehensive bibliographical and documentary investigation, besides a case study, which made us investigate the close relationship between the state's economic policy and the current water scarcity for human supply. We conclude that, considering that the Brazilian normative framework understands water as a human right and public good, the tax and tributaries benefits granted to the Industrial and Port Complex of Pecém constitute an affront to Articles 225 of the Federal Constitution and to Article 326 of the State Constitution and thus are unconstitutional.

Keywords: water management, human right, public good, tax and tributaries benefits, water injustice

1. Introduction

The current context of climate changes imposes severe challenges to the global order, as well as to the necessary reflections in the field of critical theory. Morin and Kern, analyzing the

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"planetary agony," conceptualize the state of art of the "Earth-Homeland," as well as the "humankind-community of destiny" as a "polycrisis," or the "polycritical collective," all that are set on a context of interlacing crises of development, modernity and societies, therefore, a civilizational crisis [1]. Water shortage is one of the faces of the scenario of world clime, when it makes evident the focal points of the current development policy in Brazil. In this context, the State of Ceará experiences the perverse side of the hydric crisis.¹ It is well-marked by the unfair distribution of water and its intensive destination to large-scaled development enterprises. The Industrial and Port Complex of Pecém² is an emblematic case of a hydric-intensive and polluting³ [2] enterprise, which relies on state subventions and public infrastructure to guarantee the feasibility of the enterprise. Such subventions challenge the effectiveness of the Right to Water and the dictates of the National Policy for Hydric Resources. In this research, we aim to investigate how the mechanisms of the unfair distribution of water threat the fundamental Right to Water and reinforce the selectivity of the access to the good. We use the case of the Industrial and Port Complex of Pecém as reference.

For the analysis, we emphasize the study of taxation and charging instruments and their compatibility with the legal system. In this way, the economic legal instruments that subsidize such an enterprise are analyzed under two prisms: the first concerns the balance between constitutionally protected assets and the second about the systematic interpretation of infraconstitutional hierarchy rules.

Conceptual rigor is necessary to distinguish and perceive the legal instruments under analysis. This is because the Industrial Complex of the Port of Pecém receives an articulated set of state subsidies; see:

 The State Act n. 14.920/2011 authorizes the Companhia de Gestão de Recursos Hídricos (Company for Management of Hydric Resources, COGERH, in Portuguese acronym) to grant to the companies Porto do Pecém Geração de Energia S/A (08.976.495/0001–09) and MPX Pecém II Geração de Enerbia S/A (CNPJ 10.471.487/0001–44,) 50% discount on the cost of water tax.

¹In May 2012, the Government of the State of Ceará declared situation of emergency in 168 of its Municipalities, affected by drought, through the Decree n. 30,922/2012, because of the confirmation of the abnormal situation in function of the relevant irregularity in the amount and distribution in time and space of rainfall in the state lands. This subject will be detailed through this analysis.

²The Industrial and Port Complex of Pecém (CIPP, in Portuguese acronym) was founded in 1995 and is situated in an area of 32.956,445 acres, 50 km (31 miles) from the state capital city, Fortaleza. The structures of the complex include a port terminal, a retroporto and in it there is an industrial district. Among the operating factories, there is a steel industry and a thermos-electric power plant UTE Pecém (for Usina Termelétrica Energia Pecé, working since 2012. It is coal-fired and its operation supplies electric power for 5 million inhabitants. The power-plant needs an amount of 30,000 m of water to generate 1 Megawatt, the quantity of power required to supply energy to 1000 residences.

³For instance, the Brazilian Institute for the Environment and Natural Renewable Resources (IBAMA, in Portuguese) condemned Ceará Portos, the company in charge of the CIPP, to pay 13.8 million Reais for environmental damage. The discard of mineral coal on the Pecém beach was the cause. Several seizures and penalties have already been imposed to CIPP, which is operating without some of the required licenses.

- **2.** The State Act n. 14.456/2009 ratifies the deal in which the "State commits to make feasible the negotiations with CSP to adjust the cost of average tax charged per m³ of raw water offered in the moment of initialization of the industrial installations."
- **3.** The State Act n. 15.593/2014, the State of Ceará authorized the concession of ownership to MPX Energia S/A of buildings in the plots of land 720 and 722, destined to the implementation of the Energetic Substation of Pecém II, in the Municipality of São Gonçalo do Amarante, through extra-judicial agreement of disappropriation.
- 4. The State Act n. 14.863/2011 authorizes the state to exchange the immobile good denominated Sítio Bom Jesus with the immobile present in the Anexo II, correspondent to a smaller part of the immobile with number registration 4509, of the 2nd Office of Immobile Registration of São Gonçalo do Amarante, of propriety of Rex Empreendimentos Imobilirários Ltda.
- **5.** The State Act n. 16.024 granted tax benefits to the other unity of the Complex, to be build, reducing in 58.8% the basis for calculation of the Tax of Goods Circulation and Provision of Service of Interstate and Intercity Transportation (ICMS, in Portuguese Acronym,) incident on the internal operations and on the importation of natural gas destined to the thermal-electric power plant, resulting in a tax burden equivalent to 7%. It is important to underline that the reduction is destined to internal operations of natural gas being destined to the thermal-electric power plant that is intended to build and operate in the Complex.

Such institutes will be analyzed together in the research, but distinctions will be made from the particular legal nature in which they are grouped. This is because some of them constitute the reduction of tariffs, which constitute in the so-called public prices, that is, remuneration for the provision of services, which is charged by private individuals provided with public service, for a profit-making purpose, and there is no tax and binding legal nature. Here are the reductions on the cost of water tariffs.

The tax exemptions are presented under another legal nature. The tributes express manifestation of the state power, of which the taxes, fees and contributions are species. Its regulation is made constitutionally obeying the principles of the economic order. They constitute compulsory benefits necessarily instituted by law and, when they are charged for the provision of services, they must be specific and divisible.

The other subsidies are not of pecuniary nature, but of real rights, with the concession of land and infrastructure for the enterprise. In this research, the emphasis is on the analysis of the economic institutes that reduce the charging and the taxation, interpreting it in accordance with the constitutional and legal framework that rules the matter.

At first, the central hypothesis of the work is consistent with the vertical and horizontal effectiveness of fundamental rights, to affirm that the protection of the human right to water must be guaranteed in both the tariff instruments and in the tax instruments. There is a complex normative system that governs the right to water, in which the tariff mechanisms break with the protective logic of the environment by favoring the economic model to the detriment of the norms that direct the priorities of water use.

Thus, we emphasize that the concession of tariff and tax subsidies does not constitute a decision exclusively discretionary of public managers but must primarily be fully compatible with the legal system. Having said that, it is essential to find the legal protection of water in order to analyze the legal economic instruments.

2. The hydric crisis in the background of the Anthropocene and of the climate changes: the Brazilian Northeastern semi-arid

In the context of how the case under study is inserted, it should be pointed out that the planet is immersed in a social-environmental and civilizational crisis yet not experienced by the human society. Its graver and more evident face, but not the only one, is the super warming of Earth and the climate changes. Even with the presentation of the 5th Assessment Report on Climate Change of the Intergovernmental Panel on Climate Change (IPCC), the publicizing of the previous report in February 2007 caused an unvulgar impact, due its utmost grievous conclusions. They indicate that the warming in the climate system is unequivocal, concerning to the climate changes and their consequences, as well as the causes of the warming, which are related to the emission of greenhouse gases. They are anthropogenic and not natural. The impacts on nature and society are already tangible [3]. The current situation has aggravated. 2016 was the warmest year since the beginning of temperature measurement in 1880, when this record had been broken for the third consecutive year [4]. The projections of the climate science are already indicating the catastrophic increase of 3°C (37.4° F) in the global average temperature [5]. In this scenario, the existence of extreme climate-environmental phenomena is recurrent: droughts, hurricanes, floods, etc. Such phenomena have become gradually more intense, until the moment when a war-vocabulary word had been lent to the ecological repertoire with the figure of the "climate refugee" or "environment refugee," which are already millions of people on the planet. In 2001, the International Red Cross published the "World Disasters Report," predicting the existence of 50 million climate refugees in 2050 [6]. However, the climate changes as well as the global warming are only the more evident face of a deeper crisis. It is directly related to the current configuration of the Capitalist mean of production-with its development model grounded on the fossil fuel paradigm and its productive-consumerist-centered vision.

Such social-environmental has multiple nuances, and the hydric problem is one among them. It has been manifested in the planetary order. According to the UN, water shortage affects more than 40% of the global population and must increase. It is estimated that 783 million people have no access to clean water and more than 1.7 billion people nowadays live in hydrographic basins where the use of water exceeds the reloading capacity [7]. Historically marked by inequality of access to water, the Northeastern region of Brazil, where the Pecém Port Complex is located, subsidized by tariff and tax instruments, is the part of the country where droughts are more usual. According to the Brazilian Panel for Climate Change, the decrease in rainfall during the Winter can reach 50% by the end of the century [8]. It is important to

add to this a physical-climate factor-the fact that the lands of the State of Ceará are in the drought-polygon, right in the Northeastern semi-arid. In such region, the evaporation amount exceeds the precipitation one, which aggravates the climate situation: in the analysis made by Frischkonr, Araújo and Santiago:

A mean annual rainfall of about 900 mm competes with a potential evaporation of 2200 mm powered by 3000 h of sunshine. Real evapotranspiration is of the order of 700 mm (SUDENE 1980; corresponding to 78% of rainfall), leaving only about 120 mm (13%) for runoff and 80 mm (9%) for percolation. Specific runoff in the region is of the order of 4 L/s/km² to be compared with 21 L/s/km² for all of Brazil (Barth et al. 1987) [9]. In this scenario – a collapse – in the environmental, climate and hydric spheres, we intend to research, in the following, the Right to Water and the violation to it, what happens because of the development policies adopted by the last governments of the State of Ceará.

3. Water: a common good and a fundamental human right and the denying of it as hydric unfairness

3.1. The right to water in the international law

The United Nations broach the Right to Water in many of its documents, some of them centerpiece here: The General Commentary n. 15, from November 2002, from the United Nations Committee for Economic and Social Rights, for instance, affirmed that "the human right to water presupposes that everybody should have sufficient, safe, acceptable and physically accessible water with reasonable prices for personal and domestic use."4 [10] And the Resolution 16, from April 2011, from the Council for Human Rights, with the adoption of the access to potable and safe water and sanitation as human rights. However, the major centerpiece is the Resolution A/RES/64/292 [11], passed on July 28, 2010, by the General Assembly of the United Nations⁵ [10], which declares that clean and safe water and sanitation are an essential human right for the full enjoyment of rights, as well as for all the other rights. For Wolkmer and Melo, the international recognizing of the Right to Water made the international community commit—by the National states—to the protection and tutelage of such right [12]. Nevertheless, in the field conventionally called Latin-American Neo-constitutionalism, particularly in the case of multinational States, such as Bolivia and Ecuador – countries where the Andean indigenous tradition of Well Living is spread, we can find the best deal of the hydric problem (as well as for the other environmental problems), specially from the innovating concept that Nature is itself a rights holder.

The Mother-Earth Act (*"Ley de Derechos de la Madre Tierra"*) in Bolivia, for instance, recognizes the rights of Earth as a living system. [13] In Ecuador, similar mechanisms can be found in the Constitution of the Republic itself. [14] For Marques, the recognizing of

⁴Gabriela Riva considers the General Commentary 15 as "the most complete document on the Right to Water, clarifying the duties decurrent of such right and defining precisely its bounders."

⁵In Riva's view, this resolution was "the greatest victory for the access to water movement [...] passed by 144 votes in favor, 41 abstentions and no vote in con. [...]"

the rights of nature stands beyond the "long history of the universalization of the subjects of right." Indeed, the author considers unsurpassable concept that it emanates from the demand of the conservation of the planetary biota to save, ultimately, the survival of the current society [15]. From that notion, water can be considered, in this eco-centered or bio-centered background, as a rights holder subject. Ana Alice de Carli defends this concept from the fundamental necessity of "awaking the ecological conscience and the duty of taking care of the water of all people." [16]. In the same direction, there have been taken important decisions in March 2017, in India, where the Ganges and Yamuna Rivers had obtained the status of "an alive human entity," and in New Zealand, where the Whanganui River obtained the same rights of a human being [17]. Following, it will be shown that the Brazilian law takes the management of hydric resources and the right to access to water according to the main documents of International Law, which assure the Right to Water, embodying such right into the National Law.⁶

3.2. The right to water in the Brazilian law

The conception that the political formula for the Brazilian Constitution of 1988 is the State of Environmental Law (or, in a more detailed definition, a socio-environmental democratic state under the rule of law), results of a dialectical synthesis "post-positivist," which surpasses the antinomy jusnaturalism x positivism [18], according to Belchior. It acknowledges the status of self-applicable juridical rule, and not only as a promise of rights. Marlmestein refers to what he defines as the "triumph of constitutionalism, with the renovation of the thinking and the judges in charge of the Supremo Tribunal Federal (also known as STF) the Brazilian supreme court. In his analysis of court works, he observes that"[...] nowadays, it is matter of no discussion in the jurisprudence of the STF, the understanding that it is possible to extract from the constitutional principles direct commands on the lawmakers [19], by force of the maximal effectiveness of the constitution." Among those fundamental rights-of socio-environmental nature, strictly according to the already mentioned meaning by Sarlet and Fenterseifer [20]-there are the Right to an Ecologically Balanced Environment, to Health and to Water. The Brazilian Constitution directly recognizes the first and the second ones in its own text. Even though expressed in different articles of the Constitution, there is no possibility to interpret them independently from the Rights to Health, presupposed in the Article 196, as well as the Right to Balanced Environment, in the Article 225.

The relation between the quality of the environment, which is supposed to be ecologically balanced, and the healthy quality of life, presupposed in the Article 225, can be found in the synthesis definition of the World Health Organization (WHO) that states health as "a complete state of physical, mental and social well-being and not merely the absence of disease and infirmity" [21]. Thus, there is no possible way to think a dignified life in a non-balanced, non-healthy and non-sustainable environment—in its natural, artificial or cultural dimensions. Machado stands by the idea of water as a fundamental human right, as a direct consequence

⁶The expressed rights ant guarantees in the Constitution do not exclude other ones, decurrent of the its regime and principles, or in the international deals that the Federative Republic of Brazil participates. (The Article 5, Paragraph 2 of the Brazilian Federal Constitution.)

of the Rights to a Balanced Environment and to Health, since the access to the "precious liquid," even in quantity or decent quality, is a *conditio sine qua non* for a healthy quality of life. In his own words:

The individual access to water deserves to be understood as a universal human right, which means that any person, in any part of the planet, can collect, use or appropriate water to the specific intend of survival, in other words, to not die because of lack of water, and at the same time, to enjoy the Right to Life and to Ecological Balance [22]. D'Isep, after adducing that the Right to Water is a precursor of all the other rights, clarifies a series of definitive conclusions in which those rights are present and states that the Right to Water is manifest as a "universal principle of the fundamental right to water-life" [22]. The Right to Water and Right to Sanitation are also encountered in the reflections of Sarlet and Fernsterseifer, when the authors state that it is in the theoretical framework of the State of Environmental Law that one can find what he/she denominates as the fundamental socio-environmental rights. This concept is related to the idea of indivisibility and interdependence of the fundamental human rights, in which the authors gather the rights, which are, at the same time, social and environmental. In their own words:

The environmental protection [...] is directly related to the guarantee of the social rights, since the enjoyment of these ones is dependent of favorable environmental conditions. As in the case, for instance, of the access to potable water (through sanitation, which is also a fundamental social right of the minimal necessary to existence.) [...] The effectiveness of the supply service of water and sanitary sewage integrates, directly or indirectly, the normative field of diverse fundamental rights (but, especially, the social rights), as the Right to Health, the Right to Decent Dwelling, the Right to Environment and the "forthcoming" Right to Water (essential to human dignity) as well as, in extreme cases, also the Right to Life [22].

What the authors denominate "forthcoming" right-despite the claim of its insertion in the current positive normative framework of the Constitution of the Republic, as required by Machado [22]-is already present in some recent acts, such as the *Estatuto da Cidade* (the Basic Law of the City, Act 10.257/ 2001), the *Lei de Saneamento Básico* (Sanitation Act, Act 11.445/2007), and specially, the Act that instituted the National Policy for Hydric Resources (Act 9.443/1997).⁷

Whereas in the first rule-*the Estatuto da Cidade*-the right to the environmental sanitation integrates the first list of guarantees of the so-called right to sustainable cities (one of the guidelines of urban policy), presupposed in its Article 2, Incise 1; the Act 11.445/ 2007 in its Article 3, Incise 1, defines sanitation as a collection of services, infrastructure and logistic installations of "potable water supply, sanitary sewage, urban cleanness and management of solid resources and drainage and management of urban rain water." (Act 11.445/2007, Article 3, Incise I.) The act also established as one of its fundamental principles the universalization of access (the progressive enlargement of access of sanitation for all occupied residences), in the words of its Article 2, Incise 1, combined with Article 2, Item 3.

Nowadays, the Proposes of Amendment to the Constitution n. 39/ 2007 and 213/ 2012 are submitted to the Congress examination. They propose to transform the Right to Water in a Constitutional Right.

Finally, the Act that instituted the National Policy for Hydric Resources, in this search for grounding of the fundamental socio-environmental right to water, should not be forgotten. It is the Act 9433/1997, especially concerned with the use of raw water, since the issues of potable water are part of the already mentioned policy of sanitation.

It is important to say that the principles of the National Policy of Hydric Resources (article 1 of the law) bring fundamental (some contradictory) definitions for the treatment of the right to water, namely, the character of water as a "public property" (which is consonant with the concept of the environment as "good of common use of the people", inscribed in article 225 of our Constitution) and endowed with "economic value" - which could, in theory, contain a term contradiction.⁸

The act also deals with a vision of "multiple uses" in the management of hydric resources, which alludes a perspective of conflict of the terms in a quarrel of a limited resource, as the act itself acknowledges and tends to deepen in times of climate change. It also assures that, in the situation of scarcity (and only in such cases, which is the other contradiction with the guarantee of the Right to Water), the prior use of water will be destined for human consumption and animal watering.

Water shortage, treated as a "calamity," is one of the circumstances that can lead to the suppression, partial or total, definitively or with no determined deadline, of the grants of the right to the use of hydric resources, besides other cases, such as the prevention or reversal of severe environmental degradation or the necessity to respond to prior uses, of collective interest, for those there are no other alternative source (Article 15, PNRH). According to D'Isep, the instrument of granting is an answer to the rarity of such resource, since "it legitimates the intervention of the State into the management of the access to water, therefore, in the regimentation of its use, in order to assure the social satisfaction, which is the healthy and dignified life" [22]. The grants of the rights of hydric resources consist in the instrument created to guarantee the "quantitative and qualitative control of the uses of water and the effective activation of the rights to access to water" (Article 11, PNRH) in order to guarantee, at least instance, the prime objective of the National Policy of Hydric Resources, which is, "assuring to this generation and to the next to come, the necessary availability of water, within the adequate patterns of quality to its respective uses."

And it is precisely this instrument created to guarantee the Right to Water for present and future generations that can, on the other hand, be responsible for situations of what can be called today water injustice, a concept that stems from environmental justice conception developed by Acselrad et al. [23], for whom this is a set of principles and practices aimed at equity, access to information and, fundamentally, democratic and participatory processes of defining not only the uses of environmental resources and the destination of tailings, but mainly, of public policies, especially those of socioeconomic development. In a counterpoint, the authors define environmental injustice as the mechanism through which unequal societies,

⁸The criticism against the vision of water as a worth is well grounded by Gabriela Riva, for who "the exclusive use of the economic approach did not consider the ecological bounders imposed by the water cycle and also the economic limits imposed by poverty and inequality, having done no contribution to the conservation of water and the democratization of the access to it. (Refer to the text, p. 39.)

from an economic and social view, allocate the major amount of environmental damage in lower income populations, groups racially discriminated, traditional ethnic peoples, workers' neighborhoods, the marginalized and vulnerable populations [23]. Martinez Alier, on the other hand, works with this concept-environmental justice-as one of the chains of the ecologic movement, synonym of *ecology of the poor*, or *popular ecology*. For that author, the Ethics of this movement is decurrent of the demand for social justice. According to him, "disgracefully, economic growth implies in bigger impacts on the environment, drawing one's attention to the geographical displacement of the sources of resources and the areas for waste discard" [24]. When that fair distribution of social and environmental goods is alluded, it must include water among them, a good of public domain (Article 1, Incise 1, Ac 9.433/1997) and an essential factor to healthy quality of life, preconized by the Article 225 of the Brazilian Constitution. The unfair distribution, the denial or the obstruction of that common good, as already mentioned, as well as the favorability to economic groups instead of human populations, is considered, evidently, as hydric injustice.

Working the concept of hydric injustice, as taught by Porto-Gonçalves, means thinking of water as a territory, or in other words, "[...] as the inscription of society in nature, with all the contradictions implied in the process of appropriation of nature by man and women through their social relations of power" [25]. It is interesting in this research to observe how the economic legal instruments of taxation and tariff are related to the promotion or reduction of this water injustice from the empirical case study. Those relations of power are exactly what produce environmental injustice, through the private appropriation of hydric resources, even when legalized by the instrument of grant of the right to use. The case of the "thirsty industries," in other words, hydro-intensive, located in the Industrial and Port Complex of Pecém (CIPP, in Portuguese) in the Municipality of São Gonçalo do Amarante, in the State of Ceará is a relevant example of the exposed scenario.

4. The tax benefits for the hydro-intensive industries of the Complex of Pecém: a debate on its (un)constitutionality

The economic policy of the Estate of Ceará is inserted in the context of neo-developmentism [26], associated with neo-extractivism [27]. Both share the idea of progress with unlimited growth, a perspective that justifies the appropriation of environmental goods and the conception that the state and the market consist of complementary fields, to provide economic growth, powered by large-scaled enterprises.

In such context, it is important to highlight the fundamental role the state plays in the contribution of these large-scaled enterprises. The case of CIPP is not different from others, for which the state works as a factor of stimulation and facilitation for their installation. The specific literature indicates the recurrence of environmental conflicts involving a productive hydro-extensive matrix subsidize by the state. In Ceará, the following cases are remarkable: the agribusiness in the Chapada do Apodi [28], the project of mining of uranium and phosphates in Santa Quitéria [29, 30] and the shrimp production in traditional Quilombos' lands [31]. A distinctive trace of those enterprises is in the emphasis of this research: the state subsidizing of the enlargement of environmental goods supplies, violating the nature of water as a human right and a common good [32], as discussed in the previous chapters.

The character of economic worth that is also attributed to water by the normative system is defined by Enrique Leff as a process of privatization of water, which would be "promoted in a narrative that intends to obtain the 'rational use and efficient management of water,' turning the users into payers for the 'real cost' of the resource supplying." And, in addition to that, it is characterized as one of the "strategies of the expansion of the natural capital to absorb environmental goods and services, in other words, the natural common goods of humankind." However, large-scaled enterprises happen to be polluting and hydro-extensive, in which we observe the perverse inversion in the logic of pricing of the environment: those with major economic capacity receive tax benefits from the state.

Here, there is the core of the proposed work, which is the analysis of the anti-law nature and the hydric injustice in the subsidizing granted by the state to the Industrial and Port Complex of Pecém. But before going into the analysis itself, it is important to briefly define the enterprise in question. Only for the Steel Company of Pecém, there are innumerous other public grants, and their operation obtained the grant of 1500 L a second for the company. Also, the infamous thermal-electric power plants of Pecém are owners of grants of voluminous water flows, available in the Portal Hidrológico do Ceará (Hidryc Website of Ceará, in free translation) Below follow the systemized grants:

- 1. Grant n. 41. Granted volume: 9.460.800 m³-flow 300 1/s-Recipient: PORTO DO PECÉM GERAÇÃO DE ENERGIA S/A;
- 2. Grant n. 136. Granted volume: 15.768.000 m³-flow 500 1/s-Recipient MPX Mineração e Energina LTDA;
- **3.** Grant n. 454/2016. Granted volume: 9.460.800 m³-flow 300 1/s-Recipient MPX PECEM II GERAÇÃO DE ENERGIA S/A;
- 4. Grant n. 577. Granted volume: 2.57.944-flow 891 1/s-Recipient TERMOCEARÁ LTDA.

To guarantee the feasibility of the hydric consume of the enterprise, the fifth part Eixão das Águas was inaugurated in 2014. It consists in a mean for transferring of water and interlinking of hydric basins. Besides that, the other source of water supply for the thermal-electric power plant of Pecém was the Reservoir of Sítios Novos. Its data in 2015 indicated it supplied a volume of 600 L a second, which caused its drain. In February 2017, its volume was 0.07% of its natural capacity, according to Portal Hidrológico [33].

Observing the investigative purposes of this research, initially the analysis is centered in the benefits that grant a reduction of 50% in the water tax for thermal-electric power plants and for the steel industry of the Complex. It is also remarkable how the tax subside is inserted in a complicated contribution of fiscal reductions and the availability of public infrastructure for the enterprise. This is State Law No. 14,920/2011 and State Law No. 14456/2009.

Having said that, the analysis goes through the comprehension on the juridical nature of the apparatus of the water bill. It is consistent with the propitious way that establishes the public prize and tax for the industrial consumers, presupposed in the National Policies (Federal Act n. 9433/1997) and in the State Policy of Hydric Resources (State Act n 14.844/2010). Both laws state the function of the apparatus, which is to guarantee a rational use of water.

The Act that instituted the National Policy of Hydric Resources has one chapter dedicated to the apparatus of billing water, discussing on its criteria, later regimented by the State Decree n. 32.032, on September 2, 2016. It confirms the prime goal of water bill, seen as an instrument of rationalization of water use.⁹

In Ceará, it is used as a model of billing water different from the billing used in other hydrographic basins. It is as follows:

... it is characterized by its binomial form, grounded in its marginal cost of management of hydric resources and in its capability of payment of each category of consumer. [...] However, in consequence of the necessity of structuration of the management authority, the universalization of grant, as well as a wider comprehension and acceptance of the consumers, the charging was implemented in a mononomial form, admitting taxes only defined by the water consumed. (Consumer tax) [34].

For the juridical doctrine, billing water is an instrument capable to promote sustainable development. Because of its character of public good of common use, it is affirmed that "the payment of the use does not imply in the creation of any kind of right on the water, as already observed, for being a public good, it is inalienable [35].

In the case of Ceará, the Decree that regiments the billing water presupposes different taxes for "enterprises considered as structuring for the State of Ceará" (Article 9, Decree n. 32.032/2016), which threatens the prime goals of the instituted bill.

The unsustainable water demand of the project caused the State of Ceará to approve, by law, the creation of the Emergency Water Charge, which burdened the water consumption of the thermals. In reaction to the measure, the two largest coal-fired thermals, Pecém I and II, contacted the National Electric Energy Agency (Aneel) stating that they would not be able to continue operating if the price adjustment of the energy tariff is not allowed, as a way of compensating the increase in water costs. The request was rejected by the Agency and later by the Judiciary.

The Contingency Tariff consists of an instrument authorized by State Law 16.103/2016, which created the Contingency Tariff for the use of water resources during a critical situation of scarcity. The norm was regulated by the Resolution of CONERH (Council of Water Resources of the State of Ceará) number 006/2016, providing that:

⁹The Decree defines the following criteria for the Industrial Water Bill: Article 3: The billing for the use of raw water in the domain of Ceará will vary according to the following categories of users, for surficial and underground collection: II – Industry: (a) The supply of water with complete collection and adduction by COGERH: T = 2.067 Reais and 59 Cents per 1000 m; (b) The supply of water with complete or partial collection and adduction by the user from water sources, such as reservoirs, rivers, lagoons, underground lakes and rivers or channels: T = 601 Reais and 03 Cents per 1000 m.

Article 1. Establish the value of contingency tariff for the use of the water resources of the State of Ceará, in the industrial purpose, granted to thermoelectric companies Porto do Pecém Generation of Energy, MPX Pecem II Generation of Energy S/A and MPX Mining and Energia Ltda.

In its sole paragraph, it remains clear that "The contingency fee for the use of water resources differs from the tariff for the use of water resources because it is transitory, objective to cover the additional expenses arising from the Critical Situation of Water Scarcity and stimulate rational use".

That would be sufficient to ensure that there was no confusion between the legal instruments at issue. Thus, it should also be clarified that the Resolution established that:

Article 2. The contingency tariff for the use of water resources applied to users established in the caput of Article 1 will have the value of R \$ 7210.00/1000 cubic meters.

Sole Paragraph. The amount indicated in the caput of this article will be added to the value of the collection fee for the use of water resources and applied to all the volume consumed.

Article 3. The value of the contingency fee for the use of resources provided for in this Resolution shall be charged for the duration of the Declaratory Act no. 01/2015/SRH, published in Official Gazette of October 7, 2015.

The act to which Article 3 refers consists of a Statement of Critical Situation of Water Scarcity in the State of Ceará. According to Article 2, the Tariff will have the value of R \$ 7210.00 /1000 cubic meters. If the Tariff, which is eminently transitory, is no longer applied, the companies benefiting from State Law 14,920/2011 would pay half of the industrial tariff.

It should be noted that, despite the mitigation measure created with the Emergency Charge, the consumption of water by the thermals is not decreasing, nor has the volume granted been altered, revealing that the measure proves insufficient to guarantee the protection of human supply and that there must be a complete revision of the tariff economic instruments on a permanent and non-temporary basis.

That said, it is considered that economic compensation measures cannot be ignored to reduce water consumption and increase efficiency in economic activity, either because these companies tend to pass the costs of the tariff to the price of electricity or because costing and profitability remain in force, even though the economic sector is strained by passing on the increase in costs.

In this research, it is remarked that the subject does not approach exclusively to a discretionary politic decision, since the fundamentality of the Right to Water and the infra-constitutional regimenting of the hydric management institutions conditionate and design the discretionary margin of the state agencies.

The second legal regime that merits analysis concerns tax exemptions, according to the distinction made in the introduction of this research. In the present case, in addition to the reduction on the water tariff price, the State of Ceará also reduces taxes on the main inputs of the project, notably the tax called ICMS, Service and Goods Circulation Tax.

It occurs that taxes, a kind of tribute, instituted by law and regulated under a specific legal regime, are disciplined under their own norms and principles. In Brazilian systematics, ICMS

is a tax of an extra-fiscal nature, which is a competence of all the states of the federation, subject to the principles of selectivity and essentiality, that is, to the regime of harmonious protection of assets protected by the constitutional order.

On the tax instruments, then, we must make some observations. The principle of selectivity consists of an instrument of state extrafiscality and includes a minimum selection of taxes, among them the ICMS, which was reduced as a financial contribution to the industries of the Pecém Complex. Extrafiscality consists in the use of instruments of the Tax Law whose primary purposes are not cash collection, but non-fiscal objectives, of stimulus or control to certain behaviors and economic activities.

On the other hand, the principle of selectivity establishes that, for goods of greater essentiality, the rate will be lower, and the inverse will occur for less essential (or harmful) goods. It applies to indirect taxes, that is, those that have repercussions on the final consumer, and still, a fiscal justice technique to foster the progressiveness of the tax system. It is expressly provided for in the constitutional text:

Article 153: Paragraph 3. The tax established in item IV: I - will be selective, depending on the essentiality of the product; Article 155: § 2. The tax provided in item II shall comply with the following:

III - may be selective, depending on the essentiality of goods and services;

Although subsection III, Paragraph 2 of Article 155, regarding the ICMS speaks of "may", the application of selectivity does not consist of a faculty. The correct and predominant interpretation is that the term "may" corresponds to a "must," as it is present in item I of Paragraph 3 of Article 153 of the Brazilian Federal Constitution of 1988, which establishes on the principle of selectivity also for the Industrialized Products Tax. Thus, there is no faculty, but mandatory in observance of the principle, this being the dominant understanding and that appears in the Proposal of Constitutional Reform Tax, in process in the National Congress. In RMS n° 28.227/GO, from the report of the Minister Herman Benjamin, the Second Panel of the Superior Court of Justice unanimously decided that "there is no doubt that the state legislature can not simply disregard the norm set forth in Article 155, § 2°, III, of CF, because of the inherent appropriateness of the expression "should be selective."

It should be noted that the National Tax Code also enshrines the norm, stating in Article 48 that "The tax is selective according to the essentiality of the products.". Essentiality, which guides the application of tax selectivity, is not only a moral or ideological conception, but a real verification of the importance of a merchandise or service for tax justice. The possible tax favorability seeks facilitate access to essential products for a life with quality and dignity. This is why the state charges cigarettes and alcoholic beverages, for example, and exempts medicines, food and items essential to human dignity.

It is also necessary to understand the relationship between essentiality, instruments of fiscal justice and the promotion of material equality. One of the elements that guides the extrafiscality has to be to ensure that those with greater capacity, expecially when they profit from economic activity whose nature involves risks and damage to the environment and health, deal with the tax burden. In the present case, large industries are benefiting from the fiscal renunciation of the State, with full tax capacity, making the rules that subsidize it even more incompatible with the legal system.

On the other hand, the data that indicate the annual liquid profit of the company EDP Energias do Brasil (Holder of Porto do Pecém Geração de Energia S/A – Pecém I) are relevant. It was 1265 billion Reais [36], making evident the economic capacity of the sector. It corroborates the thesis of the absence of reasonable and juridical justification and normatively based of the granted subsidies.

Synthesizing, the normative aim is to privilege the essential products for a good life, dignity, social justice, and not extremely polluting economic activities that have ample capacity to bear the regular tax burden. Therefore that is no reason to go against the increase of the final product, considering that the objective of the extra-fiscal standard is exactly discourage harmful behaviors to the community, such as the intensive and wasteful use of water, in addition to the environmental pollution caused by the thermoelectric company of the Pecém Complex.

Thus arises the reflection about the compatibility between, on one hand, the water tax reduction and subsides offered by the CIPP and, on another hand, the normative content of the constitutional principles that found the juridical order. Taking a look at the issue, the policy of subsidies with the effectiveness of the constitutional right to the balanced environment and the healthy quality of life, from which the democratic and regulated access of essential goods to guarantee human dignity, consonant with the theoretical contribution exposed in the previous items of the research.

The normative environmental discipline also deals with the protection of the hydric resources. *A priori,* it is important to remark water as a member constituent of the environment and include it in the words of the Article 225 of the Brazilian Constitution.

The constitutional embodiment of water and other rules characterizes the phenomenon denominated "Constitution of the Environment and Ecology of the Law" [37]. The normative analysis of the subject, presented in the initial chapters of this work, indicates an incongruence between the Right to Water and to Environment and the grant of tax subsidies for hydro-intensive enterprises.

In addition to that, it is worth to mention that the Article 225 also emanates from other related principle, which finds technical terminologies differenced in the doctrine, such as "the Principle of Obligation of Intervention of the Public Force," in Machado. [22] Such intervention is oriented under the criteria of distributive justice, social equality and the maximal environmental tutelage. Therefore, the state intervention in the case of CIPP is a threat to this paradigm.

Finally, the principles that interest the debate concerning water should not exclude the principles of precaution and preventive actuation, which are founded in Principle 15, of the Declaration of Rio on Environment and Development, which Brazil signs. Paulo de Bessa Antunes [38] indicates that the principle of prevention should be applied when the possible impacts in the future are acknowledged, whereas the principle of precaution (or caution) should be applied when the probable impacts are uncertain or unknown. In both cases, when the impacts are known and in front of scientific indications for the scenario of climate change, the incentive to the intensive, prodigal and polluting use of environmental goods violates the normative protective mark of the environment.

Looking at the Constitution of the State of Ceará [39], it can be observed that its text presents regimenting apparatus and its normative content is deeply damaged by the public subsidies grant to the hydro-intensive enterprises of CIPP. In its Article 318, the constitutional text states that "the State and the Municipalities have the duty do preserve their waters and to promote its rational use." In the Article 326, it states that the administration should guarantee "the multiple use of hydric resources and the apportionment of cost of the respective works in the rule of law" (Article 326, II, C.E.) and "the protection of water against actions that might compromise its present or future use" (Article 326, III, C.E.). The duty to preserve the waters, promote their rational use, and priority for human use and animal watering, are guidelines that can be observed in all legal systems in the country and state.

Thus, it can be also observed that the billing of use of hydric resources constitutes an indispensable instrument to the legality of the public management of water. This is not an option, or a discretionary act of the Administration, which can change depending on the individual to be disadvantaged. This is an administrative act fully linked to the law and its regimentations.

Therefore, our understanding is that a total or partial exemption from the billing of the use of hydric resources, with no justification under proportionality and impersonality criteria, violates the normative constitutional order. In addition to that, it does not consider the dictates of the National Policy and the State Policy of Hydric Resources in their priority of water supplying to human individuals, also damaging the principles of proportionality, reasonability and isonomy. It happens because the economic sector has a rather differenced treatment with no juridical justification.

Such considerations associated to the fatidic scenario and its severity should not be despised. In Ceará, the basin Gavião, which supplies water to the Metropolitan Zone of Fortaleza, with the Castanhão as the main reservoir in the state lands, is found in grievous situation. This reinforces the state of water shortage in Ceará and the necessity to take urgent decisions in hydric management, to guarantee the legal dictate that establishes the priority for water supplying for human individuals. It should also be highlighted that Castanhão had 4.94% of its water volume in February 2017. Currently, even after a rainfall period, the reservoirs in the state have 12.3% [40] of their capacity. On April 18, 2017, the State of Ceará declared Situation on Emergency in 168 of its municipalities for water shortage [41].

Thus, the tax and tariff instruments must be managed in accordance with the constitutionally defined environmental protection.

5. Articulated conclusions

As a contribution to the environmental critical field of investigation, we indicate the following considerations as a conclusion for this thesis:

- **1.** There is an intimate relationship between the increasing climate change, the actual hydric crisis in the State of Ceará and the scarcity of water for the human supply service in diverse locations of the state, which tend to turn for the worse under the direction of the financial policy adopted by the state.
- **2.** The Brazilian and Ceará's normative legal milestone allows to understand water as a human right and a common good.
- **3.** The high consumption of water by the Industrial and Port Complex of Pecém (CIPP in Portuguese) materializes a case of hydric injustice and violates the priority of human water supply, established by the National Policy of Hydric Resources, as well as by the State Policy for Hydric Resources.
- **4.** The granting of tax and tributaries benefits, constituent part of the context neo-developmentism, outrages the juridical nature of the instrument of billing of the use of water and the legal text of the National Policy and the State Policy for Hydric Resources, which state the rational use of water and the priority of human supply, and still defies the principles of the tax order. Both legal institutes, although of a distinct nature, are configured in economic instruments that must be in harmony with the system of environmental protection.
- **5.** The reduction of 50% in the water tax for thermal-electrical power plants, as well as for the steel industry in CIPP, is unconstitutional, for the direct outrage it does to the Article 225 of the Federal Constitution of Brazil, in addition to its fundamental principles, as well as the Article 226 of the State Constitution of Ceará.

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References

[1] Morin E, Kern AB. Terra-Pátria. Translated into Brazilian Portuguese by Paulo Azevedo Neves da Silva. 5th ed. Porto Alegre: Sulima; 2005

- [2] <http://www.ibama.gov.br/noticias/422-2017/1066-ibama-multa-ceara-portos-em-r-13-8-milhoes-por-lancamento-de-carvao-mineral-na-praia-do-pecem> [Accessed: April 20, 2017]
- [3] IPCC. Fifth Assessment Report (AR5). Available on http://www.ipcc.ch/report/ar5/ index.shtml > on March 28, 2017
- [4] Information available on <https://climate.nasa.gov/news/2537/nasa-noaa-data-show-2016warmest-year-on-record-globally/> [Accessed: April 15, 2017]
- [5] Güstschow J et al. INDCs lower projected warming to: Significant progress but still above 2°C. Climate Action Tracker. Disponível em: www.climateactiontracker.org/publications/briefing/223/INDCs-lower-projected-warming-to-2.7C-significant-progressbut-still-above-2C-.html [Accessed: October 15, 2015]
- [6] Hood M. Climate change: The increasing in the dangers for the future refugees. Available on <www.noticias.uol.com.br/ultnot/afp/2007/01/31/ult1806u5420.jhtm.> [Accessed: March 28, 2017]
- [7] Available on <http://www.un.org/en/sections/issues-depth/water/index.html>[Accessed: March 3, 2017]
- [8] Brazilian Panel for Climate Change (PBMC, in Portuguese acronym). Impactos, vulnerabilidades e adaptação às mudanças climáticas. In: Assad ED, Magalhães AR, editors. Contribuição do Grupo de Trabalho 2 do Painel Brasileiro de Mudanças Climáticas ao Primeiro Relatório da Avaliação Nacional sobre Mudanças Climáticas. COPPE. Rio de Janeiro, RJ, Brasil: Universidade Federal do Rio de Janeiro. p. 414
- [9] Frinschkorn H, Araújo JC, Santiago MMF. Water resources of Ceará and Piauí. In: Gaiser T, Krol M, Frischkorn H, de Araújo JC, editors. Global Change an Regional Impacts: Water Availaibility and Vulnerability of Ecosystems and Society in the Semiarid Northeast of Brazil. Berlin, Heidelberg, New York, Hong Kong, London, Milan, Paris, Tokyo: Springer; 2003. p. 87
- [10] Riva GR, Saab. Água, um direito humano. São Paulo: Paulinas; 2016. p. 80
- [11] United Nations. Available on: http://www.un.org/ga/search/view_doc.asp?symbol=A/ RES/64/292> [Accessed: April 04, 2017]
- [12] Wolkmer MFS, Melo MP. O Direito Fundamental à Água: convergências no plano internacional e constitucional. In: Moraes GO, Marques Júnior WP, Melo ÁJM, org. As águas da UNASUL na Rio+20: direito fundamental à água e ao saneamento básico, sustentabilidade, integração da América do Sul, novo constitucionalismo latino-americano e sistema brasileiro. Curitiba: CRV; 2013. p. 13
- [13] Bolivia. Available from: http://bolivia.unfpa.org/content/ley-no-71-de-derechos-de-lamadre-tierra [Accessed: March 10, 2017]
- [14] Ecuador. Available from: http://www.asambleanacional.gob.ec/sites/default/files/documents/old/constitucion_de_bolsillo.pdf [Accessed: March 10, 2017]
- [15] Marques L. Capitalismo e colapso ambiental. Campinas, SP: Editora da UNICAMP; 2015. p. 609

- [16] De Carli AA. Água é vida: eu cuido, eu poupo: para um futuro sem crise. Rio de Janeiro: Editora FGV; 2015. p. 43
- [17] Information available on: <https://www.publico.pt/2017/03/21/mundo/noticia/foi-a-vezdos-rios-ganges-e-yamuna-conseguirem-os-direitos-de-um-ser-humano-1765964> [Accessed: March 10, 2017]
- [18] Belchior GPN. Hermenêutica Jurídica Ambiental. São Paulo: Saraiva; 2011. p. 90
- [19] Marlmestein GL. 25 anos da Constituição de 1988: presente, passado e futuro. In: Paulo Rogério MC, Maria Vital da Rocha, organizadores. 25 anos da Constituição de 1988: os direitos fundamentais em perspectiva. Fortaleza: Expressão Gráfica; 2013. p. 29
- [20] Sarlet IW, Fensterseifer T. Estado socioambiental e mínimo existencial (ecológico?): algumas aproximações. In: Sarlet IW, org. Estado socioambiental e direitos fundamentais. Porto Alegre: Livraria do Advogado Editora; 2010
- [21] WHO. Definition of Health. Disponível em: http://www.who.int/about/definition/en/print.html> [Accessed: May 25, 2017]
- [22] Machado PAL. Direito Ambiental Brasileiro. 22.ed. ver, ampl. e atual. São Paulo: Malheiros; 2014
- [23] Acselrad H et al. O que é justiça ambiental. Rio de Janeiro: Garamond; 2009. p. 4
- [24] Martinez Alier J. O Ecologismo dos Pobres: conflitos ambientais e linguagens de valoração. Tradução de Mauricio Waldman. São Paulo: Contexto; 2007. pp. 33-34
- [25] Porto-Gonçalves CW. O desafio ambiental. Rio de Janeiro: Record; 2004. p. 152
- [26] Sampaio Jr., Plínio de Arruda. Desenvolvimentismo e neodesenvolvimentismo: tragédia e farsa. Vol. 112. São Paulo: Revista Serv. Soc. Soc.; 2012. pp. 672-688
- [27] Milanez B, Santos RSP. Neodesenvolvimentismo e neoextrativismo: duas faces da mesma moeda?. In: 37o. Encontro Anual da ANPOCS, 2013, Águas de Lindóia. Annals of the 37th The Annual Meeting of the Association of the Post-Graduations of Social Sciences (ANPOCS, in Portuguese acronym); 2013
- [28] Rigotto RM et al. Agrotóxicos, trabalho e saúde vulnerabilidade e resistência no contexto da modernização agrícola do Baixo Jaguaribe, Ceará. 1ª ed. Fortaleza: Editora UFC e Coedição Expressão Popular; 2011
- [29] Melo RD. Riscos Ambientais e Processos de Vulnerabilização: diálogos e controvérsias em torno do Projeto de Mineração de Urânio e Fosfato em Santa Quitéria, Ceará [thesis (Master in Environment and Development)]. Fortaleza: Universidade Federal do Ceará (UFC); 2015
- [30] Montezuma TFPF. Licenciar e Silenciar: análise do conflito ambiental nas audiências públicas do Projeto Santa Quitéria, CE [thesis (Master in Law)]. Universidade Federal do Ceará (UFC): Fortaleza; 2015

- [31] Meireles AJ, Cassola R, Tupinambá SV, Queiroz LS. Impactos ambientais decorrentes das atividades da carcinicultura ao longo do litoral cearense, Nordeste do Brasil. Mercator—Revista de Geografia da UFC, the 6th Year, n. 12; 2007
- [32] Leff E. Discursos Sustentáveis. São Paulo: Cortez; 2010. p. 110
- [33] Ceará. Portal Hidrológico. Disponível em http://www.hidro.ce.gov.br/# [Accessed: April 20, 2017]
- [34] Finkler NR, Mendes LA, Bortolin TA, Schneider VE. Cobrança pelo uso da água no Brasil: uma revisão metodológica. Revista Desenvolvimento e Meio Ambiente. 2015;33:33-49 [abr]
- [35] Barros WP. A água na visão do direito. Porto Alegre: Tribunal de Justiça do Rio Grande do Sul, Departamento de Artes Gráficas; 2005. p. 97
- [36] Information available on: http://edp.infoinvest.com.br/static/ptb/dividendos.asp?language=ptb [Accessed: March 10, 2017]
- [37] Benjamin AH. Direito Constitucional Ambiental Brasileiro. In: Canotilho JJG, Morato Leite JR, orgs. Direito Constitucional Ambiental Brasileiro. 2nd ed. São Paulo: Saraiva; 2008
- [38] Antunes PB. Direito Ambiental. Rio de Janeiro: Lumen Juris; 2007. pp. 37-39
- [39] Ceará. The State Constitution. Available on: http://www.ceara.gov.br/simbolos-oficiais/ constituicao-do-estado-do-ceara [Accessed: April 15, 2017]
- [40] Ceará Portal Hidrológico. Available on <http://www.hidro.ce.gov.br/#> [Accessed: April 4, 2017]
- [41] Diário do Nordestes. Emergência é decretada em 61 municípios do CE. Available on http://diariodonordeste.verdesmares.com.br/cadernos/regional/emergencia-edecretada-em-61-municipios-do-ce-1.1740441 [Accessed: April 20, 2017]





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