THE EXTRAFISCALITY AND THE TAXATION OF POTABLE WATER SUPPLY SERVICES IN BRAZIL: POSSIBILITIES AND ALTERNATIVES

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Abstract: Without water the human body does not survive. It is not just the human species, but all living things need water, animal or vegetable. Having that in mind, and considering the current problem of water scarcity in the country and the recent recognition by the UN of the human right to water and sanitation, it is evident the urgency in the search for ways to preserve this element that is indispensable for maintaining life. The extrafiscal taxation of the supply of drinking water is one of the many options for governmental actions that could be used with the purpose of safeguarding so precious good. However, a more in-depth analysis of the possible tributary types to fulfill this function is essential, especially as regards their advantages and disadvantages.

Keywords: Water, Taxation, Extrafiscality, Fundamental rights, Sustainability.

1. INTRODUCTION

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ater, in its pure form, is a colorless, odorless and tasteless liquid, without which the human body can't survive. Not only humankind, but all living beings need water for the functioning of their organism, whether it's an animal or a vegetable being. Therefore, it can be stated that water scarcity undoubtedly causes a limitation in the social and economic development of the affected region, since while their population become unable to use potable water for consumption, the industry, agriculture and livestock also remain unable to use water for their production.

According to the National Water Agency of Brazil (ANA)[1] and the data collected by UNESCO, in approximate numbers, 97% of the total water available in Earth is salted. Of the remaining 3% of available water, 2.5% are frozen in Antarctica, Arctic and glaciers around the world, therefore, not accessible for human use. Thus, of the total water available in the world, humankind and all other living beings depend exclusively on 0.5% of fresh water. This small percentage is located in aquifers,[2] natural lakes, man-made reservoirs, in rain, and, on a smaller scale, in rivers. Among this worldwide percentage of fresh water available for consumption, Brazil occupies a privileged position: the country has the domain of 12% of the world's water availability. This percentage rises to 18% if flows from foreign territory are considered.[3]

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[1] AGÊNCIA NACIONAL DE ÁGUAS. Fatos e tendências: Água. Brasília: Agência Nacional de Águas, 2009, p. 9. Available in: <http://arquivos.ana.gov.br/imprensa/publicacoes/fatosetendencias/edicao_2.pdf>. Access in March 2017.

[2] Aquifers are natural reservoirs of groundwater. Unlike the rivers and lakes, which are renewed and self-protected in a few days, the aquifers do not have this capacity, which is why the careless use of these kind of water is of extreme concern. Brazil has in its territory the largest reservoir of clean water in the world, the Guarani Aquifer, which, to a lesser extent, also enters Argentine, Uruguayan and Paraguayan territory (GRANZIERA, Maria Luiza Machado. Direito Ambiental. São Paulo: Atlas, 2015, p. 302-305).

[3] GRANZIERA, Maria Luiza Machado. Direito Ambiental. São Paulo: Atlas, 2015, p. 275.

Through the analysis of the data provided by ANA and UNESCO, it remains evident the urgency in the search for means to preserve this element, since it is indispensable for the maintenance of life and exists in extremely reduced quantity in the environment. Besides, the importance of the Brazilian role in the protection of this natural resource is visible, considering Brazil is one of the main holders of the worldwide available fresh water reserves. Therefore, it is important to keep in mind that the carelessness about water uses and its scarcity in Brazilian territory affects not only Brazilian society but the world population, which is why it is imperative to adopt government actions to safeguard this precious resource and is why an in-depth study about the legal possibilities for this protection it is needed.

2. LAW AND WATER

Before we approach the main subject of this study, which is the use of taxation in order to induce more protective behaviors in relation to water, it is essential to discuss, even briefly, the fundamental right to this natural resource and the way its regulation takes place on Brazilian legislation, to later deepen the possibilities of its taxation.

2.1. THE HUMAN RIGHT TO FRESH WATER AND THE GOVERNMENT'S DUTY OF PROTECTION AND GUARANTEE.

The UN General Assembly, on 26 July 2010, acknowledged the "right to safe and clean drinking water and sanitation as a human right that is essential for the full enjoyment of life and all human rights".[4] The acknowledge of this right as a human right is based on the significance that this natural resource has

[4] SARLET, Ingo Wolfgang; FENSTERSEIFER, Tiago. Direto ambiental: introdução, fundamentos e teoria geral. São Paulo: Saraiva, 2014, p. 274.

for the guarantee of other recognized human rights, such as life, health, an ecologically balanced environment, among others. As Ingo Sarlet and Tiago Fensterseifer point out in their work, the UN declaration highlights the recognition of interdependence and indivisibility that must run through the entire treatment of human and fundamental rights. After all, how can we guarantee the health and especially the life of a human being if he does not have access to the element that guarantees his subsistence? How can we ensure an ecologically balanced environment for a society if there is no fresh water for this environment to grow and develop? It is, therefore, clear that these human rights are fundamentally dependent on the right to safe and clean water, which is why the protection of this right needs a special attention.

The right to clean water, unlike what happens in other countries,[5] is not expressly included in the Brazilian Constitution,[6] the water itself appearing only in the chapter that discuss about the properties of the Union and the States. Below the Constitution, the Law nº 9.433/97, which establishes the National Water Resources Policy, defines water as both a public domain property and a limited natural resource with economic value. Thus, it is perceptible that water in the Brazilian legal system is still understood as a good of economic value rather than as an essential resource for the maintenance of life.

It can be argued, however, that because of the principle laid down by the Art. 4, II, of the Brazilian Constitution, which proclaims that the Federative Republic of Brazil is guided by the prevalence of human rights, the right to safe and clean water must be nationally protected, since it is internationally

[5] Examples of Constitutions expressly providing for the right to clean water as a fundamental right are those of Bolivia (Article 20, III), which states that the access to safe drinking water and basic sanitation is a human right, and that of Ecuador (art. 12), which states that the access to water is a fundamental and inalienable right.

[6] Since 2007, the National Congress has submitted the Constitutional Amendment Proposal No. 39, which proposes to modify the art. 6 of the 1988 Federal Constitution to include water as one of the social rights cited in its *caput*. However, this proposal was archived in 2019.

recognized by the UN as an essential human right. Nonetheless, notwithstanding the international recognition of this human right, the right to clean water would still be necessarily protected by the Brazilian Constitution, considering, as already mentioned, the need to guarantee the others constitutional rights and the dignity of the human person through the access to fresh water and basic sanitation. Thus, the fundamental character of this right is evident and its implicit provision in the Brazilian constitutional text can be defended.

Even if was denied the implicit recognition of the fundamental right to clean water in the Brazilian Federal Constitution or its recognition through art. 4, II, the protection and usage control of this resource would remain considered a public power duty due to the art. 225 of the CF/88. This because the maintenance and protection of water is indispensable for ensuring an ecologically balanced environment and, consequently, the healthy quality of life.

By reading the art. 225, §1º, V, of the Brazilian Constitution,[7] we can visualize the legal provision of the Government's duty to control the production and commercialization of substances that present a risk to life, quality of life and/or to the environment, clearly fitting in here the duty to control the usage of fresh water in order to guarantee the quality of life of all individuals and also the preservation of an ecologically balanced environment.

Fundamental rights, including the fundamental right to an ecologically balanced environment, which, in a sense, embrace the fundamental right to clean water, are right-duties.

[7] Art. 225. All have the right to an ecologically balanced environment, which is an asset of common use and essential to a healthy quality of life, and both the Government and the community shall have the duty to defend and preserve it for present and future generations. §1º In order to ensure the effectiveness of this right, it is incumbent upon the Government to: [...] V - control the production, sale and use of techniques, methods or substances which represent a risk to life, the quality of life and the environment.

Therefore, the citizen and the State are both creditors and debtors of this protection. With regard of the fundamental duty of protection, this duty has a defensive and an active function. As Ingo Sarlet and Tiago Fensterseifer explain, the fundamental duty of environment protection requires:

> [...] both the adoption of the necessary measures to safeguard the ecological balance, as in the case of measures aimed at the conservation of the environmental patrimony or the repair of ecological damage, as well as negative measures, which occurs in the case of to prevent the individual from carrying out a certain activity that, even potentially - in the view of the precautionary principle - can cause environmental damage, such as deforesting the area of ciliary forest or pouring chemical into a stream.[8]

Thus, it is the responsibility of the State to adopt negative and active measures to protect the right to safe and clean water and, consequently, the right to life and the right to an ecologically balanced environment. Among the possible support measures is the granting of tax incentives or the incidence of higher taxes on this natural resource, using the extrafiscality to stimulate the conscious use of water by the population, a theme that will be better explored in the course of this work.

2.2. DOMAIN AND GRANT: HOW IS WATER REGULATED IN BRAZIL?

As Maria Luiza Machado Granziera points out, water has very specific characteristics. At the same time that "it constitutes

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[8] *"[...] tanto a adoção de medidas prestacionais necessárias à salvaguarda do equilibro ecológico, como ocorre na hipótese de medidas voltadas à conservação do patrimônio ambiental ou à reparação de um dano ecológico causado, quanto de medidas negativas, o que ocorre no caso de impedir o particular de realizar determinada atividade que, mesmo potencialmente – ante o princípio da precaução –, possa acarretar dano ambiental, como desmatar a área de mata ciliar ou despejar produto químico no córrego de um rio"* (SARLET, Ingo Wolfgang; FENSTERSEIFER, Tiago. Direito Constitucional Ambiental: Constituição, Direitos Fundamentais e Proteção do Ambiente. São Paulo: Editora Revista dos Tribunais, 2013, p. 245).

an environmental resource, protected by the Public Administration, because of its importance to human consumption and ecosystems, it is an input of productive processes, such as electric power and industry".[9] In this way, it has both the value of environmental good, so must be protected, and the value of economic good, thus can be used for this purpose. It is imperative, therefore, that its use be regulated for economic purposes, but always having in mind its protection.

The Federal Constitution mention water when lists the properties of the Union and the States, in Articles 20 and 26. According to the legal text, water belongs to the Union when it is in its domain (such as in a federal conservation unit), when they bathe more than one State, when they serve as a boundary with other countries or when they extend into or from foreign territory, as well as marginal lands and river beaches. Also, the territorial sea and hydroelectric power potentials belong to the Union, where hydroelectric power plants can be installed. The remaining areas of surface or groundwater, fluent, emerging and deposited water are left to the States.

Also, with regard to the competence to legislate about water, the art. 22, IV, confers this prerogative to the Union when the legislation is about civil law rules. States are, therefore, allowed to establish administrative and management rules on goods under their control, including water resources.[10] Thus, as we can see, there is a decentralized management of this resource in Brazil, which allows the existence of both a National Policy and several others State Policies of Water Resources.

Due to this division of the domain, and according to the constitutional provision,[11] it was up to the Union to establish the National System of Water Resources and to define standards for

[9] GRANZIERA, Maria Luiza Machado. Direito Ambiental. São Paulo: Atlas, 2015, p. 276.
[10] GRANZIERA, Maria Luiza Machado. Direito Ambiental. São Paulo: Atlas, 2015, p. 278.
[11] Article 21, XIX, Brazilian Constitution.

granting the right to use these resources. In 1997, the Law nº. 9.433 was issued, establishing this system. This Law is still responsible for regulating the use of water in Brazil. The National Water Resources System is responsible for coordinating integrated water management and is composed of collegial bodies, the Public Administration and civil organizations of water resources. Both, the Union and the states, have representatives in this system, so that water management is carried out in the most harmonious way possible.

Regarding the granting of the right to use water resources and the collection that can be carried out due to this use, some collegial bodies of the system should be highlighted. Among this collegial bodies are the National Council of Water Resources (CNRH), responsible, among other attributions, for establishing general criteria for the granting of the right to use water and its's collection. Also, we find, among the collegial bodies, the Hydrographic Basin Committees, created precisely for cases where a hydrographic basin has waters of both the Union and the States. These committees are composed of representatives of both public powers, as well as representatives of affected Municipalities, water users and civil entities of water resources that have activity in the respective hydrographic basin, thus allowing a balanced management. Among its responsibilities is the establishment of mechanisms for charging the use of water resources and suggestion of amounts to be collected, which are forwarded to the CNRH or to the State Councils that are responsible for approving these proposed mechanisms and values.

Finally, ANA, the National Water Agency of Brazil, is responsible for supervising, controlling and evaluating actions and activities related to water resources, especially with regard to the administrative police power. It is also its responsibility the granting of the right to use water resources when is water of the Union's domain. ANA is still responsible for the collection, distribution and application of revenues earned through the use of

water resources. Such collection cannot be carried out by entities of private law, since these resources are of a public nature, in the form of a public price, therefore, impossible to be implement by the aforementioned collegial bodies, which have a portion of private entities in their composition.

It is important to emphasize that water, as a public good of common use, can be utilized by any individual. However, the granting of the right to use water is necessary to establish conditions and limits to the private use of this resource, since in this case the use by others it is affected. In order to properly managing these grants, the same law that created the National System of Water Resources (Law nº 9.433/97), also instituted the Brazilian National Water Resources Policy, providing planning, control and economics instruments for this management. The implementation of these instruments it is responsibility of the aforementioned public and private bodies and entities that compose the National System.[12] One of the economic instruments provided by the law is the collection for the water resources use, which aims at giving the user an indication of the real value of water, as well as its rationalization and also to obtain financial resources for the financing of programs and interventions for the management and preservation of this natural resource. The application of this specific economic instrument will be further explored in the following topic.

2.3. INSTRUMENTS OF COLLECTION FOR THE USE OF WATER RESOURCES AND ITS INSUFFICIENCY

As explained in the previous topic, one of the instruments of the National Water Resources Policy is the collection for the use of water resource in order to indicate to the user the real value of the water, as well as to encourage its rationalization and,

[12] GRANZIERA, Maria Luiza Machado. Direito Ambiental. São Paulo: Atlas, 2015, p. 286.

finally, to obtain financial resources for programs and interventions. Beyond that, Resolution nº 48/2005 issue by the National Water Resources Council (CNRH) added two more goals for this instrument, one of which is to induce and stimulate the conservation, integrated management, protection and recovery of water resources. In this way, the collection for the use of water resources can be utilized as an instrument to induce behaviors, in order to stimulate the rationalization of this natural resource.

The total amount of water on our planet remains the same since the appearance of the first living beings. However, due to the excessive population growth, the consumption of this resource by the different human activities increased seven times in the last 60 years.[13] We are living, therefore, in a so-called "hydric stress", where the various uses that humans make of water are not compatible with its natural availability. The human consumption of water for food, hygiene and industrial production are classified by the doctrine as partially consumptive, that is, this uses returns part of the water to the rivers in the form of sewage and industrial effluents,[14] unlike what happens with irrigation in agriculture, considered an activity of totally consumptive use. In any case, this classification does not consider the impact that human use has on water, since the return of it in the form of sewage and industrial effluents can contribute to pollution and loss of quality of a whole water source when poorly executed.

Still, we have to take into account that a considerable percentage of this consumption by humans is due to leaks, submeasurements and fraud. It is estimated that in the 27 Brazilian

[13] WHATELY, Marussia. Haverá água para todos? Available in: < http://diplomatique.org.br/havera-agua-para-todos/>. Access in March 2017.

[14] VARGAS, Marcelo Coutinho. O gerenciamento integrado dos recursos hídricos como problema socioambiental. Revista Ambiente & Sociedade, Campinas, nº 5, p. 109-134, 1999, p. 111-112. Available in: <http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1414-753X1999000200009&lng=pt&nrm=iso&tlng=pt>. Access in March 2017.

capitals, 45% of the water withdrawn from springs is wasted. The amount of wasted water is estimated at 6.14 billion liters per day and would be sufficient to supply the daily consumption of 38 million people.[15] The excessive use of water is also a concern in Brazil. The UN recommends a daily consumption per capita of 110 liters, while the average Brazilian per capita consumption in the capitals is 150 liters per day and in cities such as São Paulo, Rio de Janeiro and Vitória these numbers reach 220 liters per day per inhabitant.

The domestic overuse becomes irrelevant near to the immense waste that industry, agriculture and livestock entail. In Brazil, 72% of the available water is used for irrigation and, according to research led by the FAO (United Nations Food and Agriculture Organization),[16] about 60% of the water used is lost due to the chosen methods. The research also points out that if this waste were reduced by at least 10%, it would be possible to supply twice the world population today. It is therefore necessary that government actions also have a special focus in these sectors.[17]

The consequence of this domestic and mercantile habits is that Brazil, which holds 12% of the planet's clean water supply, is disputing with Mexico the trophy of who waste more clean water in the world.[18] With these data in mind and considering the recognition of the right to water as a fundamental right by the UN and the way this resource is regulated in Brazil, we

[15] WHATELY, Marussia. Haverá água para todos? Available in: < http://diplomatique.org.br/havera-agua-para-todos/>. Access in March 2017.
[16] WALBERT, Allan. Agricultura é quem mais gasta água no Brasil e no mundo. Available in: <http://www.ebc.com.br/noticias/internacional/2013/03/agricultura-e-quem-mais-gasta-agua-no-brasil-e-no-mundo>. Access in March 2017.
[17] It is interesting to note that the National Water Resources Policy, in its art. 1, III, defines that in situations of scarcity, the priority use of water resources is the consumption of humans and animals, which would require industry rationing before domestic rationing.
[18] WHATELY, Marussia. Haverá água para todos? Available in: < http://diplomatique.org.br/havera-agua-para-todos/>. Access in March 2017.

have to question what kind of action should be taken to succeed in preserve this essential natural resource.

Maria Luiza Machado Granziera states in her work that the law must impose for the use of water:

> (...) restrictions, whether of an administrative nature or of a financial nature, as in the case of the collection for the use of water resources, with the objective of controlling usage and avoiding scarcity and injustice, as the lack of access to water for basic needs such as human consumption. [19]

The art. 2 of the National Water Resources Policy provides as its objective to ensure the current and future generations the necessary availability of water, in quality standards appropriate to their respective uses. In order to achieve this objective, the aforementioned collection for the water resources use could be used, since it is sought through the implementation of this instrument, among other things, a change in users' behaviors. It should be noted that this charge is a public price, not a tax, and its product has application linked to the specific projects to be carried out, as a priority, in the hydrographic basin where they were generated.

It occurs that, currently, among the rivers of Union's domain, the charge for the use of water has already been implemented in the Paraíba do Sul River Basin, in the Piracicaba, Capiviri and Jundaí Rivers Basins, in the São Francisco River Basin and in the Doce River Basin. The Paranaíba River Basin was also included since March 10, 2017, according to the CNRH Resolution nº 185/2016.[20] Several states have also implemented this instrument, such as Rio de Janeiro, São Paulo, Paraná and

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[19] *"(...) restrições, seja de cunho administrativo, seja de natureza financeira, como é o caso da cobrança pelo uso dos recursos hídricos, com vistas a proceder ao controle do uso e evitar a escassez e injustiças, como a falta de acesso à água para as necessidades básicas, como o consumo humano*" (GRANZIERA, Maria Luiza Machado. Direito Ambiental. São Paulo: Atlas, 2015, p. 282).

[20] AGÊNCIA NACIONAL DE ÁGUAS. Cobrança pelo uso da água começa a valer na bacia do rio Paranaíba. Available in: < http://www2.ana.gov.br/Paginas/imprensa/noticia.aspx?id_noticia=13183>. Access in March 2017.

Ceará.[21]

Considering the water crisis recently experienced by the population, mainly in the State of São Paulo, it is noticed that the collection did not obtain great results regarding to the induction in water rationing. The National Water Agency itself provided a report to evaluate the implementation of the collection in the Paraíba do Sul River Basin, covering the period from 2003 to 2011, in which it is noticeable that the use of water remained practically constant after the implementation of its collection, with only a small reduction in the consumption, almost irrelevant.[22]

One of the possible reasons why this economic instrument is not achieving its objective in inducing rationing and preservation by users of these basins is that their amount is still considered irrelevant by them, not affecting them sufficiently to modify their behavior. Thus, it is urgent to think about other possibilities of behavior induction, which is why the development of this work proves necessary.

3. WATER TAX?

In view of the urgent need to protect water because of its undeniable importance for humanity, the fundamental nature of the access to this resource, since it is responsible for guaranteeing other fundamental rights, such as the right to a dignified and healthy life, and the visible inefficiency of the economic instruments already applied in the country in order to encourage its rationing, it is questioned: would it be possible to tax the services

[21] AGÊNCIA NACIONAL DE ÁGUAS. Cobrança pelo Uso de Recursos Hídricos. Available in: <http://www2.ana.gov.br/Paginas/servicos/cobrancaearrecadacao/cobrancaearrecadacao.aspx>. Access in March 2017.

[22] AGÊNCIA NACIONAL DE ÁGUAS. Avaliação da Implementação da Cobrança pelo Uso de Recursos Hídricos de Domínio da União na Bacia Hidrográfica do Rio Paraíba do Sul. Available in: < http://arquivos.ana.gov.br/institucional/sag/CobrancaUso/Cobranca/RelatorioAvalImplCobPBS03_11.pdf>. Access in March 2017.

of supplying clean water or the water itself with the aim of inducing a more sustainable conduct by the population? This question has been increasingly frequent in the academic world, which is why it is the central focus of this study.

3.1. THE SUSTAINABLE TAXATION PRINCIPLE

Taxation has two prominent functions in the Democratic State of Law: on the one hand, a collection function and on the other an extra-fiscal function. The collection function has traditionally been considered the main function of taxes, so that the public policies must be carried out by public expenditures democratically defined in the budget law. [23]

The public budget should detail the expenses to be incurred and the revenues needed to carry out the constitutional tasks. The legislator must, for this conception, choose the economic facts that can be taxed, which will constitute legal-taxable facts. The calculation of the revenue required for public tasks is subject to adjustment, due to the Science of Finance, and standardization by the Financial Law. The tax rates, calculation basis and hypotheses of incidence will be adjusted according to the necessary fiscal policy. Thus, in the environmental fiscal policy will be taking into account the values needed to guarantee the prevention, protection and recovery of the environment, especially through public actions.

The Tax Law in this classical conception is not concerned with the facts chosen, nor with its economic and financial reasons. The legal-taxable fact is the result of a democratic, public and legitimate process derived from a long process of selection between competitive choices. The legislator, when determining the incidence of the norm on a certain economic event,

[23] CALIENDO, Paulo.; MUNIZ, Veyzon Campos ; RAMME, R. S. Tributação e sustentabilidade ambiental: a extrafiscalidade como instrumento de proteção do meio ambiente. Revista de Direito Ambiental, v. 76, p. 471-491, 2014.

decided among several economic, financial and technical variables, by that one that is capable of allowing the most adequate and efficient solution for the attainment of the intended purpose.

The traditional tax interpretation seeks to clarify, as accurately as possible, the moment of legal incidence, as well as the scientific fulfillment of the normative components. It is not their task to investigate the effects of taxation, nor the allocation of the resources collected. This is the function of the Financial Law, and thus each specialty must realize the best of its science in pursuit of its purposes.

The Tax Law is guided by rigorous requirements of analysis on the incidence of the tax norm and on the constitutional limits of the power to tax. The complicated norms of competence division are, by themselves, a gigantic challenge for tax lawyers. The correct determination of the competence rule requires the analysis of a whole set of factors that provoke the formal incidence of the tax norm. Without these strictly completed elements, the phenomenon of taxation will not be processed.[24]

The classical interpretation has encountered important new challenges. It was up to the scholars emphasizing that, in addition to the classic problems of occurrence of taxable events, others also deserved the attention of jurists. Is the problem of normative effectiveness. It is not enough to question the isolated phenomenon of subsumption, when, in order to be realized, it must obey several formal and material limits of incidence. The rule should be edited by a competent authority, but it must also respect material limits, such as: the ability-to-pay principle, the isonomy principle, the essentiality principle, the proportionality principle and so on. The material limitations on the power to tax have proved as important as formal and competence limitations.

The challenges of the material control would require a

[24] CALIENDO, Paulo. Direito Tributário: Três modos de pensar a tributação. Elementos para uma teoria sistemática do direito tributário. 1. ed. Porto Alegre: Livraria do Advogado, 2009. v. 1.

new tax theory. It would not be enough to look at the normative structure, it would be necessary to verify the intended ends. The study of the normative effectiveness demands new and important tools of analysis, a new methodology, new approaches, observation of studies in other sciences, and so on.

The tax norm could no longer be interpreted alone, but rather be examined in the constitutional context where constitutional principles emanate meaning for the whole system. The structuralist reductionism prevented the correct understanding of the phenomenon of the normative concretion. The individual and concrete norm was no longer the result of a logical operation from a mere subsumption of the fact to the norm, but the complex result of the weighting of rules, principles, and normative values. Even the simple cases would demonstrate the situation where normative-axiological weighting and hierarchy were previously defined.

In the classical model, valuation weights and hierarchization were already previously resolved by the fiscal policy, under the Finance Science and Financial Law prognostics. There was no sense in reopening these dilemmas. The competitive ends had been analyzed and the desired end chosen, selected among many other possibilities, with the adequate methodology. It would be a pretension of the Tax Law, with its analytical instruments, to want to invalidate the choices previously made, democratically realized.

The great dilemma arises from a complex society, where the legislation and the Constitution allow the legitimate stay of different ends in the normative texts. It demands the protection of freedom, but demands the promotion of equality. It protects property, but demands its social function. The structural shock between distinct models is the symbol of contemporary constitutional texts. On one hand, private autonomy is protected, on the other, the preservation of the common good is guaranteed. Two important implicit principles will emerge from this delicate

balance: subsidiarity and solidarity.

The subsidiarity principle invokes individual responsibility for defining the means to be used to determine the best choices. There is a belief that the individual decisions will converge towards optimal solutions for all. If each one of us is left freely to set his goals, the outcome will be better for everyone. The individual who seeks the best health, education, housing and other personal goods, will unconsciously steer society to a better level.

On the other hand, the solidarity principle indicates that the mechanism of optimal individual choices may fail for a variety of reasons: lack of information, education, weakened social structure, regional and social inequalities, concentration of political power, lack of common goals between generations and classes. The solidarity appears as a counterpoint and as a correction to the failures of the individual autonomy. In some cases, the exclusive pursuit of personal interests may in the long run generate a general loss. This is the famous dilemma pointed out by Garrett Hardin's "tragedy of the commons", which has shown that certain goods require a distinct model of protection.[25]

The economic theory has also shown that it may be individual interest to participate in collaborative choices. Individual goals cannot always be achieved purely by the individual effort and responsibility, requiring coordinated actions. This is the classic example of the servant hunt and the Nash's theorem. In both cases, it is demonstrated that the joint action can bring superiors individual results than the individual action.[26]

Once demonstrated the legitimacy and coherence of the solidarity and subsidiarity principles, it should be emphasized that both must be in tune and balance, not being the object of this article to ask about its compatibility in the constitutional text.

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[25] HARDIN, G. The tragedy of the commons Science, Vol. 162, 1968, pp. 1243-1248.
[26] CALIENDO, Paulo. Direito Tributário e análise econômica do Direito - uma visão crítica. 1. ed. São Paulo: Campus/Elsevier, 2008. v. 1.

The doctrine was pressed to embrace a very new, instigating and complex theoretical set. It was not enough to study the norm's structure, but also its normative effects. The intended internal and external purposes. How to accomplish this without falling into a methodological syncretism? Into a misuse of economic and financial concepts? The interpretation of the legal phenomenon should accept the contributions of an economic and social analysis. It is not a question of corruption or submission of the juridical to the social and political, but of a methodological openness that accepts external influences and reinterprets them according to a systematic theory of the Tax Law.

The tax is understood in another dimension, in addition to the fiscal one, so the doctrine will deal with the extra-fiscal effects of the tax rules. Systematic interpretation demands that sustainability be adopted as an explicit value (axiological) and principle (deontological), once the duty of development is included in the preamble of the CF/88, whose normative concretion is extracted from art. 3º, II, art. 174, sole paragraph (balanced planning and development), art. 192 (financial system must promote development that serves the interests of the collectivity), art. 205 (full development of the person), art. 218 (scientific and technological development with a duty to observe ecological limits) and art. 219 establishing, undoubtedly, the commitment of the Federative Republic of Brazil to promote development in this sense.

It is considered one of the main innovations of the Federal Constitution of 1988, in view of the 1967 Constitution, precisely the establishment of the state's duty to promote environmental protection. This duty was explicitly stated in art. 225, in the sense that "*all have the right to an ecologically balanced environment, which is an asset of common use and essential to a healthy quality of life, and both the Government and the community shall have the duty to defend and preserve it for present and future generations*", combined with art. 170, which establish

that "*the economic order, founded on the appreciation of the value of human work and on free enterprise, is intended to ensure everyone a life with dignity, in accordance with the dictates of social justice, with due regard for the following principles*: [...] *VI - environment protection, which may include differentiated treatment in accordance with the environmental impact of goods and services and of their respective production and delivery processes*.

It is noted that the protection of the environment is reinforced in several constitutional provisions, such as articles dealing with the Union competence (art. 21, XIX and XX and art. 22, IV, XII and XXVI), the common material competence between all entities (art. 23, III, VI, VII, IX and XI) and the legislative competences (Article 24, points VI, VII and VIII), as well as in other specific provisions. Still, there are articles related to the sustainability in general, for example, we have the provision that deals with the balanced planning and development (art. 3, paragraph 2 and art. 174, sole paragraph), which gives the financial system the power to promote development that serves the interests of the community (art. 192), the provision of the scientific and technological development, with the duty to observe ecological limits (art. 218), among others.

The environment defense imposes the constitutional protection of an intangible good of common property, being a legitimate public good to be protected by the whole community. As a consequence of the orientation established by the Constituent Assembly, the infraconstitutional legislation enshrined this protection in several laws, such as the Forest Code, the National Environmental Policy, and others. Specifically, it highlights the art. 99, I, of the Civil Code that determines that public goods are: "*I - those of common use of the people, such as rivers, seas, roads, streets and squares*". It is therefore observed that the constitutional and legal provisions referred demonstrate that the coresponsibility of all in the protection of common property

requires a cooperative stance. In this context, the duty of solidarity is imposed, defining the objective of protection of shared benefits and responsibilities.

It is inferred, from this normative spectrum, the obligation of the State, in its various spheres, as well as of the citizens, to adopt measures that "*promote long-term development conducive to a multidimensional well-being (social, economic, ethical, environmental and legal-political)*", which composes the current concept of sustainability.

From the perspective of the Constitutional Tax Law, the motto of the achievement of sustainability, as an ordering principle, corresponds to the duty of fiscal solidarity, which correlates the duty to pay taxes to the promotion of fundamental rights. In this context, solidarity influences freedom, insofar as it establishes a bond of brotherhood between those who participate in the group receiving positive benefits, especially those related to social minimums and diffuse rights.

Still from a constitutional-fiscal perspective, it should be mentioned that the sustainability principle is directly related to the prevention and precaution principles, which guide the system based on ethical and legal precepts arising from the society of risk, such as transparency, responsibility, precaution, prevention, social solidarity and group solidarity.

In this perspective, the promotion of measures that encourage behaviors that value the bonds of solidarity is a duty that cannot be forgotten by the Public Power, otherwise it may be an odious omission. In addition, in consideration specifically to this search, it follows from the sustainability principle, in correlation with the prevention and precaution principles, the need to accept the preferential character of the protection of clean water.

3.2. SUSTAINABLE TAXATION OF WATER

The problem of the present study is directed to the

question of how the taxation of clean water could help in the preservation of this good of common use. A number of similarly important approaches for water protection will not be considered, such as: taxation of commercial water, treatment of sewage and rainwater, sanitation and technological innovation standards. The tax protection measures of rivers, seas and other water courses will not be subject to study either, but only the taxation of the supply of clean water. The choice of this specific theme, as already mentioned, is justified by the importance of clean water for a dignified life, as well as the fragility of its protection.

First of all, it is imperative to talk about the nature of the remuneration for the supply of clean water. It would be considered that such remuneration would be a tax fee. The tax fee are specific and divisible tributes, according to art. 145, II, of CF/88, which states that they may be levied: "*by virtue of the exercise of police power or for the effective or potential use of specific and divisible public services, rendered to the taxpayer or made available to him*". The supply of clean water fee, therefore, can be classified as a service fee, considering that the National Tax Code (CTN), in its art. 79, disciplines public services as those used by the taxpayer: a) effectively, when they are used for any reason or b) potentially, when, being of compulsory use, they are placed at their disposal through administrative activity in effective operation. Also, public services can be: a) specific, when they can be deployed in autonomous units of intervention, utility or public need; or c) divisible, when susceptible of use, separately, by each one of its users.

However, in addition to the possibility of the service fee, according to the Brazilian Superior Court of Justice (STJ), the remuneration for the supply of clean water can be made by means of public prices (tariffs), when the service is provided by private individuals, through a public concession or permission. Thus, there is no obligation for the service to be provided exclusively by the Government. The Superior Court established this

understanding in the Precedent nº 407, when determining that "*it is legitimate to charge the water by tariff, fixed according to the categories of users and the consumption ranges*".

Ives Gandra Martins points out that it is not enough to characterize the service provider to determine the nature of the tax, being also necessary an analysis of the established link between them. If the provision is compulsory by the State and there is no room for voluntariness in hiring, then the service is public and the remuneration charged will be a tax fee and not a public price. The Superior Court has already emphasized the public interest in private water supply, but considering its private provision and remuneration through public prices as legitimate, so that the rational use of water resources is stimulated, especially when there is a staggered collection according to categories of users. [27]

Once this discussion has been overcome, we turn to the analysis of the possibility of incidence of the ICMS tax (a tax charged on sales and services) on the supply of clean water with an extra-fiscal purpose. In relation to this controversy, the Supreme Court has already positioned itself, in the judgment of the RE n. 607056, with general repercussions already recognized, deciding that the ICMS tax cannot affect the supply of clean water. In the case in point, the State of Rio de Janeiro argued that the ICMS tax could be imposed, because the piped water could not be considered as an essential public service in the proper sense since it would be subject to a cut in case of non-payment by the user. In the opinion of the State, water could be considered as a commodity, because it is a corporeal good, fungible, consumable and transferable onerously, not found outside of commerce.

The Supreme Court adopted the thesis drawn up by the rapporteur, Justice Dias Toffoli, in order to determine the essential nature of the service of water supply to the population. For

[27] AgRg no Ag 1084537/RJ , 1ª T., Min. Teori Albino Zavascki, DJe de 18/02/2009.

the Justice Luiz Fux, water should rather be considered as a public good of common use, standing outside of the concept of merchandise. For Fux, paying the public price for its supply does not imply an assumption of its nature as a good of economic value, being only a measure of effective protection of this good, in view of the risk of its rationing. The Court therefore held a position to set aside the ICMS tax on the supply of clean water, following the its previous guidelines. [28]

Justice Marco Aurélio and Justice Ricardo Lewandowski, who argued that the taxation of clean water would allow a more rational use of this scarce good, have voted in the opposite direction, warning about the distinction between the protection of *in natura* water and chemically treated water, that imply in a different good.

In our understanding, considering clean water as a commodity would not achieve the desired goal, since the value collected by water taxation would only be used for the costing of the public machine and would not have extra-fiscal sense of protection. And if water were considered as an essential commodity, then it should be protected by the principle of essentiality and would necessarily be in the basic food basket. In one way or another, the goal would not be properly achieved. Perhaps, given the importance of the subject, water supply should be considered as a first-rate essential service, which would require a solution other than the consideration of water as commodity simply.

One possibility that could be debated would be the institution of an Intervention Contribution in the Economic Domain (CIDE), aiming at the environmental protection of water or other essential and exhaustible natural goods. This alternative would be allowed by art. 149 of the CF/88. Thus, the new tribute could be instituted since the collected resources had specific destination of environmental protection. However, some criticisms can be raised against this type of proposal, such as the existence of a

[28] ADIs 567 e 2224.

large number of taxes, the increase in the tax burden, the damage to the business and productive sector that the institution of this contribution would entail, the difficulty of controlling the allocation of related taxes, the permanent character of these interventive taxes, among many others. Even so, in view of the fundamental right to be protected, despite the considerable disadvantages of the institution of this CIDE, the option cannot be immediately disregarded and should be weighed and further analyzed for possible application.

An alternative to the institution of an Intervention Contribution in the Economic Domain would be the institution of a specific environmental tax that should obey the regime of art. 154, I of the Brazilian Constitution, which authorizes the establishment of new taxes, provided that by means of a supplementary law and since they are non-cumulative and do not have a hypotheses of incidence or calculation basis specific to those described in the Constitution. This proposal, however, would run counter to the prohibition of taxes with a sanctioning nature. However, it is important to point out that there are exceptions to the principle of prohibition of confiscation, as in the case of extra-fiscal taxes, which have no collection function but a function as an instrument of political, economic or social action. Therefore, the imposition of a specific environmental tax on the water supply, having a primarily extra-fiscal purpose, would be possible and would contribute to the induction of the rationing of this natural resource.

4. FINAL CONSIDERATIONS

After this brief analysis of the tributary species that may be imposed on the supply of clean water with an extra-fiscal purpose, it is noticed that the tax protection of water is a complex problem that demands absolute priority in the search for adequate solutions. The possibilities presented have advantages and

disadvantages and need to be weighed in the light of the importance of the fundamental right in question.

Certainly, drinking water, as a natural resource indispensable for human survival, including being elevated to human right by the United Nations, requires greater protection by the Brazilian State. There is still some question as to which tax should be used to induce the rationing of this good, but it remains certain that the supply of this resource needs to be controlled and better regulated, so as to guarantee, including for future generations, the access to drinkable water and, consequently, a dignified life.

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