

Strategic Management Of Degraded Areas Recovery: Public Policy And Social Function Of Rural Properties.

Priscila Elise Alves Vasconcelos¹ and Paulo Sérgio Vasconcelos²

Abstract

This study discusses the social function of property and public policies that benefit the recovery of degraded areas in Brazil and in Portugal. The social function of property meets simultaneously rational and appropriate land utilization taking the natural resources available, preserving the environment. With regard to public policies to encourage the recovery of degraded areas, demonstrates the significant increase in concern for the environment at the triple points: environmental, social and economic. External influences from the European Economic Community made the Portuguese Government to have a greater concern for the environment. Through public policy incentive to regional and economic development, it is possible a better and greater growth of degraded areas, avoiding desertification of these sites. There is still much to be done both in Brazil and in Portugal related to environmental, social and economic aspects together with land utilization. Thus, this study aims to present the legal and institutional aspects of the social function of the property and the strategic management of degraded rural areas recovery.

Key words: Environment, Land recovery, Public Policy, Management



Available online
www.bmdynamics.com
ISSN: 2047-7031

INTRODUCTION

This paper deals with two major issues related to the recovery of degraded soils: the social function of the property and the existence of public policies to encourage the recovery of areas in Brazil and in Portugal. Multidisciplinary teams could be gathered for the implementation of programs aimed at the recovery and environmental restoration, aiming to rescue the biological and socio-economic potential of the area. In 2012, Brazil had an area of 140 million hectares of degraded areas, being present in all biomes and regions (Brazil, 2012). Is more intense in areas where there is a human occupation for over time, which are the regions of Atlantic forest. Thus, this study aims to present an strategic management action covering the legal and institutional aspects of the social function of the property and the recovery of degraded rural areas. To this end, an exploratory study, with bibliographical and documental analysis of themes related to the social function of land, public policy and the recovery of degraded areas. In the sequence, the social function of land under the legal approach. After, this paper discusses the encouraging recovery of degraded soils through public policy. Finally, comments about the environmental guardianship in Portugal and presents the final considerations of the work.

SOCIAL FUCTION OF RURAL PROPERTY

With the Constitution of the Republic of Brazil (Brazil, 1988), the social function acquires status of principle sections XXII and XXIII of article 5, where the right of ownership will fulfill its social function. According to Silva (1998) the principle of the social function of property turns capitalist property, without socializing and conditions as a whole, and not just its execution. The social function of the property is a basic principle and foundation of the right assignment, its recognition and warranty, focusing on the content itself, being an essential element for the qualification of modes of acquisition, enjoyment and use of the goods. Raymond Saleilles, Silvio Perozzi and Antonio Hernandez Gil understand the sociological theory of ownership as the most advanced, since it considers its social function status of socioeconomic principle (Tartuce, 2016). To Figueira Jr (2003), the sociological theories of ownership, which occurred in

¹ Master in Agribusiness. Environmental Master Business - MBE. Lawyer.

E-mail: prisvascon@gmail.com

² Professor, Doctor in Science. School of Business Administration, Accountability and Economics. Federal University of Grande Dourados. Brazil

E-mail: paulosvasconcelos@ufgd.edu.br

the 20th century in Europe (Italy, France and Spain), were responsible for externalization of property through its true social function. It must be recognized the social and economic importance of the Institute (Melo, 2007).

Cielo (2013) demonstrates that the requirement of social destination related to land is a production of items indispensable to the survival of human beings. In Brazil, there are more than 50 years there is concern in assigning to it a duty to give land property a specific social function, for the collective interest and not just to the individual. In 1993, law nº 8,629/93 (Brazil, 1993), created the agrarian reform program by the Federal Government, involving the rural settlements in the Brazilian territory, where unproductive or areas that were not complying with the social function would be liable to expropriation.

For Cielo (2013), the social function is a power-duty of positive behaviors (preserve, not clear above a certain percentage), as dictated of legal order. The social function is manifested in the structure of ownership, in the modes of acquisition, enjoyment and use of the goods. For Tartuce (2016), the principle of the social function of ownership is implicitly in the Brazilian civil law to check the valuation possession-work. Maluf (2013) adds that there is a progressive socialization of the property, based on the criterion of social utility for greater and more extensive protection to the interests and common needs. Reports that the social function of the property contained in the CRFB (Brazil, 1988) and the Civil Code of 2002 (Brazil, 2002) suffered a major influence of the classical doctrine of Leon Duguit, for whom property translates as a social function to be exercised by the holder of the wealth, not a mere entitlement of the individual.

Claims Lobo (2015) that in order to fulfil the social function of property does not necessarily should be related to economic exploitation. To respect the constitutional principles outlined in articles 182 and 183 of the CRFB, should be obeyed the fundamental requirements of the city ordinance, when urban property or rational and appropriate use of the land, rural property. In the latter case, the use of available natural resources, preserving the environment, compliance with labour legislation and the welfare of workers could be checked for compliance with the social function. For Pedroso (2002), the social function of property is element of the structure and legal status of the property, being a principle of private property. The social function of the structure, the content itself, the right to property, in addition to the existing police power, inserted in the structure of the design and concept of the right to intellectual property. Important to highlight data obtained from 2006, where is shown a relevant percentage of unproductive areas in Brazil, and the northern region of the country has about 82.6% of its area without any productive utilization (Figure 1).

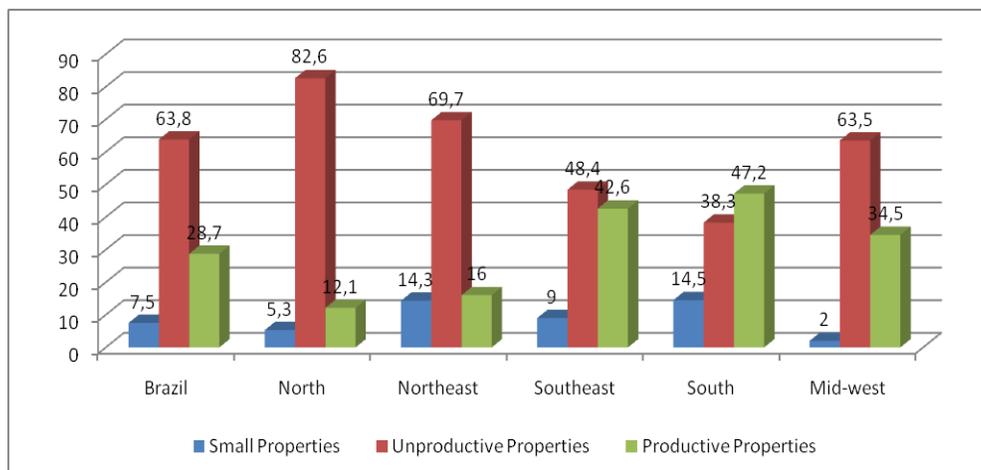


Figure 1 – Occupied areas (%) by rural properties in Brazil and geographical regions.
Source: Based on Dieese, 2006.

PUBLIC POLICY AND THE RECOVERY OF DEGRADED AREAS IN BRAZIL

With the forest code (Brazil, 2012), based on sustainable development, there was an emphasis on preservation, protection and restoration of native areas. There is the commitment to the maintenance of biodiversity, soil, water resources, climate integrity in order to ensure the well-being of present and future generations. Governmental actions for the protection and sustainable use of natural resources, the pursuit of a sustainable agricultural activity for economic growth for the development of bioenergy and food markets also were highlighted in the new forest code (Brazil, 2012), including responsibility for all federal entities. A study done by the laboratory of imaging and processing from the Federal University of Goiás (UFG) along with the Secretariat of Strategic Affairs of the Presidency of the Republic (SAE), in 2014, found that approximately 45% of the grazing areas with at least 25 acres, in Brazil, are of low productivity (Brazil, 2016). Used data extracted from IBGE for that study, and use information from EMBRAPA (2016), where they concluded that about 70 million acres of grasslands in Brazil are of degraded areas (SAE, 2014).

In 2014, the Ministry of environment (MMA), has launched the national plan of recovery of native vegetation PLANAVEG (2014). The objective of this plan is to expand and strengthen public policies, financial incentives, markets, agricultural practices and other measures necessary for the recovery of native vegetation at least 12,500,000 hectares, in the next 20 years. The main object is in the areas of permanent preservation (APP) and legal reserves (LRS) and degraded areas with low productivity.

In the years of 2014 and 2015, aiming at combating desertification, Dryland Champions program (MMA, 2015), whose aim is to pay tribute to the activities of persons and/or organizations and companies that make a practical contribution to the sustainable management of land. Among the actions, activities, initiatives and projects (on-site and/or off-site) to introduce, facilitate, promote and/or implement practices and policies at local/national level related to the sustainable management of the Earth's productive land protection through the prevention of soil degradation and restoration of degraded areas through sustainable land management and related practices, including the restoration of the landscape, through actions, initiatives and/or projects aimed at contributing to the improvement of the environmental condition of the dry lands and the condition of life of the people.

MMA (Projeto GEF-Terrestre, 2015) released public notice seeking the recovery of permanent preservation areas for water production, to promote the selection of proposals for financial resources, non-refundable. The aim was the achievement of forest recovery actions in permanent preservation areas located in watersheds that contribute directly or indirectly to the reservoirs supply of metropolitan areas. In October 2015, MMA has launched the project-land, for restoring degraded landscapes (Projeto GEF-Terrestre, 2015). One of the goals of the project, there is an increase in the stock of carbon, the adoption of sustainable management practices in the areas of native vegetation and promoting connectivity and gene flow among the protected areas (MMA, 2015). It also has three main lines: the creation of new protected areas in the *Caatinga*, *Pantanal* and *Pampa* biomes, increasing the effectiveness of conservation in protected areas and the involvement of landowners and local communities in biodiversity conservation actions.

In March 2016, the State Government of Mato Grosso do Sul, through tax incentives (in case the exemption of ICMS), published a State law for implementation of public policies involving products produced in grazing areas recovered. Called State program of Degraded Pasture recovery-"good land", aims to promote the recovery of degraded soils through planting new crops, where the products will be exempted from taxation produced there from GST. There will be a significant increase in support capacity of the pastures, increase the production of grain, beef and timber, the gross value of production and the generation of new jobs (SEPAF, 2016).

Along with the environmental impact studies, recovery of degraded areas is an environmental management tool. According to the law, which treats 9,985/2000 on the National System of conservation unit - SNUC (Brazil, 2000), the recovery of degraded areas are closely linked to restoration ecology, whose objective is to assist the restoration of ecosystems degraded, damaged or destroyed. The restoration of essential ecological processes and environmental recovery obligation of that degraded area is already defined by the Constitution of the Republic regulations of 1988, demonstrating how it is essential to the protection and preservation of the environment - art. 225, CRFB/88 (Brazil, 1988).

Furthermore, since the implementation of the national policy on the environment, law n° 6,938/81, recovery of degraded areas and protection to threatened areas of degradation are principles. One of the goals is the preservation and restoration of environmental resources to rational use and permanent availability - art. 4. of Law 6,938/81 (Brazil, 1981). In 2010 (Brazil, 2010), the Program of sustainable production of palm oil, for the expansion of palm oil production and creating instruments to ensure a production in sustainable environmental and social bases. By Decree n° 7,172/2010, was included in the program the agro-ecological zoning - ZAE of oil palm to the deforested areas of the Amazon (Brazil, 2010). It delimits the suitable areas (soil and climate) in regions occupied by man without environmental restrictions, with the delimitation of 30 million hectares of degraded areas in the region able to receive palm cultivation and contribute to the environmental recovery of these lands. The program aims to achieve the recovery.

Recovery occurs when the site changed is worked so that the environmental conditions end up if standing next to the conditions prior to the intervention. It is back to the balance and stability of active processes - Federal Decree 97,632/89 (Brasil, 1989). Bitar & Braga (1995) argue that recovery is a term that encompasses both recovery and rehabilitation, besides quoting techniques that have a potential for relevant degradation. They are mining, waste disposal, occupation of hillsides, urban and rural *boçorocas*, irrigated agriculture and water courses and bodies deposits. According to Embrapa Environment, degraded area is the one who suffered, to some degree, disturbances in its integrity and can be physical, biological or chemical. Recovery is the reversal of a degraded condition to a not degraded condition regardless of its original status and future destination (Rodrigues and Gandolfi, 2001).

For the recovery of a degraded area in physical, chemical and biological integrity (structure), it is necessary, at the same time, the recovery of productive capacity (function), is in the production of foodstuffs and raw materials or in the provision of environmental services. Depending on the nature and severity of degradation, plus all the effort required to rollback, according to Aronson et al. (1995) and Rodrigues and Gandolfi (2001), can be considered the techniques of recovery, the return to the condition prior to degradation or stable intermediate state; rehabilitation, return the intermediate state of that which has been degraded; and redefining, where human intervention is required for recovering the area for use or destination other than existing. The Federal Decree 97,632/89 (Brazil, 1989), in article 3 establishes the purpose of PRAD, Degraded Area recovery policy, which is the return that place downgraded to a usage in accordance with a pre-established plan of land use, with the aim of a stable environment.

Some cultures are used for soil recovery there are studies that show that the sugar cane can be used for this purpose, without generating more impacts to the environment. For the production of sugar and ethanol, the expansion of culture occurs mostly on degraded areas and pastures, thus making these areas productive again and with economic viability. Staut (2006) reports that the sugar cane has a root system in relation to the exploration of the deeper layers of soil when compared with the root system of other cultures. And this system is correlated with productivity achieved mainly in low fertility soils and less ability to retain moisture.

In 2013, was approved the bill number 626/2001 by the Commission for the environment, consumer protection, supervision and control of the Senate, that reviews the agro-ecological zoning-ZAE cane and authorizes planting in altered areas and in *Cerrado* biomes and *Campos Gerais* in Legal Amazon area. According to Camelini (2013), through the installation of sugar and ethanol plants, among other factors, it is possible to achieve development through integrated planning. The recovery of degraded soils through other cultures was brought in 2015, Law 13,153/15, a national policy for combating desertification and mitigating the effects of drought. Combating desertification is "set of environmental and socio-environmental recovery activities with the sustainable use of natural resources in arid, semi-arid and dry areas, with a view to balanced development" (Brazil, 2015). Among the instruments of this program, highlight the item (IV) of article 6 of the law: "the plans, programs, objectives, initiatives, projects and actions aimed at the recovery of degraded areas" (Brazil, 2015).

The project aims to expand the agricultural frontier for the planting of sugarcane and the production of biofuels, especially ethanol. The crop of sugar cane in the degraded areas of the Legal Amazon enables a

more efficient supply of biofuels in the national territory (Northern region), in addition to the increase of exports. In 2012, through the national information System on the environment (SINIMA), created the rural environmental record (CAR), being a database for control, monitoring and combating deforestation of forests and other forms of vegetation native in Brazil, the environmental and economic planning of the use and occupation of the rural properties (Brazil, 2012). Through the CAR in the legal reserve areas, the suspension of sanctions for irregular suppression of protected areas, obtaining agricultural credit among others. Until May 2016, 91% of the Brazilian rural areas had already carried out the CAR, corresponding to 359.5 million of hectares (Figure 02).

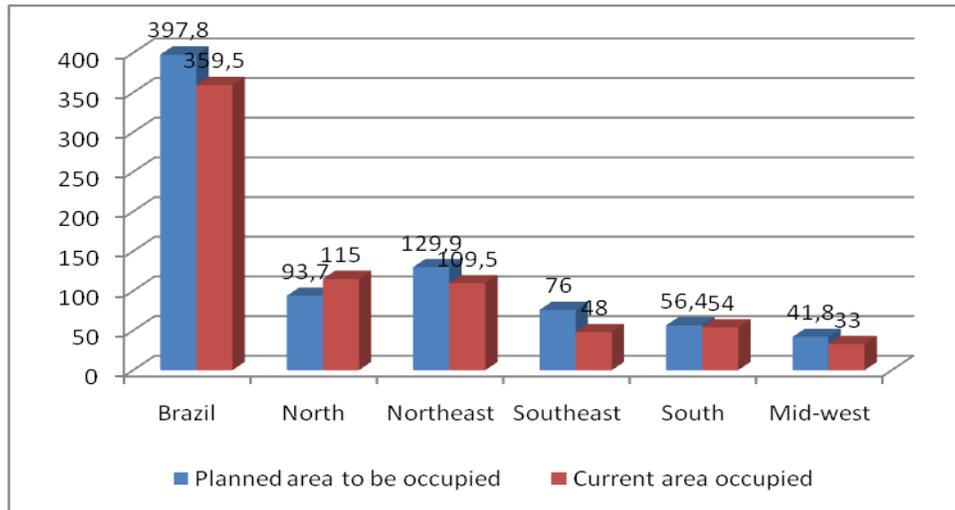


Figure 2 - Rural Area utilization (million of hectares) geographic regions and total Brazil.
Source: based on data from the Brazilian Forest Service (Brazil, 2016).

Some Brazilian States have programs for recovery of degraded areas, such as Rondonia that in 2014, spurred aquaculture for recovery of riparian vegetation (SEDAM, 2014). Mato Grosso do Sul, in 2016, created the State program of Degraded Pasture recovery, called "good land" (State Decree No. 14,424/16), for the production in grazing areas claimed through tax incentives, aiming at the recovery, within five years, the productive potential of two of the eight million hectares of pastures.

THE ENVIRONMENTAL GUARDIANSHIP IN PORTUGAL

The Constitution of the Republic of Portugal, in article 66 provides for sustainable development and the use of public policies for the rational use of the environment (Portugal, 1974). In 1987, named European year of the environment, with the framework law on the environment for environmental issues there was the beginning of the process of institutionalization of public policies on the environment (Law No. 11/87, of April 7, 1987). After the floods of Lisbon occurred in 1967, is that Portugal is beginning to see the importance that environmental guardianship has (Tavares, 2013).

Soromenho-Marques (2005) points out the entry of Portugal into the European Economic Community in 1986, as a watershed for the environmental concern. The country received Community funding lines that were combined the political and legal mechanisms, essential at that time in order to implement the principles of economic and social cohesion. Ramos Pinto (2006) points out that the framework law on the environment and the environmental Associations (Law n° 10/87) are the two fundamental qualifications to the acceleration process of institutionalization of public policies.

Through Decree-Law No. 48/95 (Portuguese Penal Code), the environment is a legal guardianship, being provided for environmental crimes, which are those crimes against nature damage and pollution crimes (Tavares, 2013). The National Environmental Policy Plan (Portugal, 1995) as well as provide for the principle of shared responsibility, strengthened the participation of society in making decisions, prioritizing environmental education (Nunes Correia, 1995). In 2007 the Agency is created in the environment (Regulatory Decree No. 53/2007) for greater efficiency in the management of environment,

development policies and monitoring the implementation of policies to combat climate change and emissions of gaseous pollutants, environmental impact assessment, waste, prevention of risks among others (Tavares, 2013).

FINAL CONSIDERATIONS

The programs of recovery of degraded areas (PRAD) are important instruments of environmental management for all types of anthropogenic activities. In this sense, multidisciplinary teams should be gathered for the implementation of programs aimed at the recovery and environmental restoration, allying conservation strategies to rescue the biological and socio-economic potential of the area. Realize that with the advent of the Constitution of 1988 (Brazil, 1988) and the Civil Code of 2002 (Brazil, 2002), with the constitutionalisation of private law, the possession and the valorisation of the social function of property in Brazil. The property has a personal interest, subject only to have a socially-oriented, where the collective interest prevails for the good of the individual. Degraded areas recovered reflect on avoidance of deforestation, as well as prevent desertification. Related to Portugal, there was a strong influence of European Union law and international law in the area of environment. To be more effectiveness in environmental supervision through public policies, Brazil and Portugal still need progress requiring new studies on the subject.

REFERENCES

- Aronson, J. et al. 1995. Restauration et rehabilitation des ecosystems degradés en zones arides et semi-arides. Lê vocabulaire et lês concepts. In: PONTANIER, C. et al. (Eds.) *L' homme peut-il refaire ce qu'il a défait?* Paris: John Libbey Eurotext.
- Bitar, O.Y. & Braga, T.O. 1995. O meio físico na recuperação de áreas degradadas. In: Bitar, O.Y. (Coord.). *Curso de geologia aplicada ao meio ambiente*. Associação Brasileira de Geologia de Engenharia (ABGE) e Instituto de Pesquisas Tecnológicas (IPT). São Paulo, p.165-179
- Brazil. 1981. Lei no. 6.938/81 – Política Nacional do Meio Ambiente.
- Brazil. 1988. Constituição da República Federativa do Brasil.
- Brazil. 1989. Decreto N° 97.632, de 10 de abril de 1989.
- Brazil. 1993. Lei no. 8.629/93 – Programa de Reforma Agrária do Governo Federal.
- Brazil. 2000. Sistema Nacional de Unidade de Conservação – SNUC. Lei no. 9.985/2000.
- Brazil. 2002. Código Civil Brasileiro. Lei no. 10.406/2002.
- Brazil. 2010. Zoneamento Agroecológico do Dendezeiro para as Áreas Desmatadas da Amazônia Legal. ZAE. Programa de Produção Sustentável de Palma de Óleo. Decreto n° 7.172/2010
- Brazil. 2012. Sistema Nacional de Informação sobre o Meio Ambiente – SINIMA. Lei no. 12.651/12. Código Florestal Brasileiro.
- Brazil. 2015. Lei no. 13.153/15 – Política Nacional de Combate à Desertificação e Mitigação dos efeitos da seca.
- Brazil. 2016. Serviço Florestal Brasileiro. Números do Cadastro Ambiental Rural - 2016.
- Camelini, J. 2013. Disponível em <<http://www.ihu.unisinos.br/entrevistas/520335-plantacao-de-cana-de-acucar-na-amazonia-legal-o-ciclo-se-repete-com-novos-desmatamentos-entrevista-especial-com-joao-camelini>> (acesso em: 6 março 2016).
- Cielo, Patricia F. L. D. 2013. O princípio da função social do imóvel rural. *Juris, Brazil*.
- DIEESE. 2006. *Propriedades Rurais*. Brochura. Brasil.
- EMBRAPA. 2016. *Meio Ambiente*. Embrapa, Brazil.
- Figueira Jr, J. D. 2003. *Novo Código Civil Comentado*. 2. Ed. Atual. Coord. Ricardo Fiuza. Ed Saraiva, São Paulo.
- Lobo, Paulo (2015). *Direito Civil. Coisas*. Saraiva, São Paulo.
- Maluf, C. A. D. 2013. *Limitações ao Direito de Propriedade*. 3 ed. São Paulo: RT. pp. 73-74.
- Melo, M. A. (2007). *Direito das Coisas*. Rio de Janeiro: Lumen Juris, P. 23-24.
- MMA. 2015. *Dryland Champions Program*. Ministério do Meio Ambiente. Brazil.
- Nunes Correa, F. 1995. *Plano Nacional de Política de Ambiente*. Lisboa: Ministério do Ambiente e Recursos Naturais.
- Pedroso, S. S. 2002. O conceito de função social da propriedade na CF/88. *Viajus*. Brazil.

- PLANAVEG. 2014. Plano Nacional de Recuperação da Vegetação Nativa -. Ministério do Meio Ambiente. Brazil.
- Portugal. 1974. Constituição da República Portuguesa.
- Portugal. 1995. Legislação Ambiental Portuguesa
- Projeto GEF-Terrestre. 2015. Ministério do Meio Ambiente. Brazil.
- Ramos Pinto, J. 2006. De uma política pública de Ambiente e Educação Ambiental em Portugal a uma Estratégia Nacional de Educação Ambiental: sucessos e fracassos in *Ambiental Mente Sustentable* - Revista Científica Galego-Lusófona de Educação Ambiental. Corunha, Vol. 1 n.ºs 1 e 2.
- Rodrigues, R.; Gandolfi, S. 2001. Conceitos tendências e ações para a recuperação de florestas ciliares. In: Rodrigues, R. R.; Leitão Filho, H.R. (Eds.). *Matas ciliares: conservação e recuperação*. 2 ed. São Paulo, Edusp. p. 235-247.
- SAE. 2014. Secretaria de Assuntos Estratégicos da Presidência da República. Brasil.
- SEDAM. 2014. Secretaria do Estado de Desenvolvimento Ambiental. Rondônia. *Aquicultura no Estado. Lei Estadual nº 3.437/2014*.
- SEPAF. 2016. Programa Estadual de Recuperação de Pastagens Degradadas. Decreto Estadual 14.424/16. Mato Grosso do Sul. Brasil.
- Silva, J. A. 1998. *Curso de Direito Constitucional Positivo*. 14 ed. São Paulo, Malheiros.
- Soromenho-Marques, V. 2005. *Raízes do Ambientalismo em Portugal, Metamorfoses. Entre o Colapso e o Desenvolvimento Sustentável*. Mem Martins: Publicações Europa-América.
- Staut, L. A. 2006. *Condições dos solos para o cultivo de cana-de-açúcar*. Infobios. Brazil.
- Tartuce, F. 2016. *Manual de Direito Civil. Volume único*. Rio de Janeiro: Método. P. 918.
- Tavares, Bruno R. 2013. *O ambiente e as políticas ambientais em Portugal: contributos para uma abordagem histórica*. Portugal.