

THE PROHIBITION PRINCIPLE OF SOCIO-ENVIRONMENTAL RETROGRESSION: ANALYSIS OF THE FLEXIBILITY OF LEGISLATION ON THE USE OF PESTICIDES

O PRINCÍPIO DA PROIBIÇÃO DO RETROCESSO SOCIOAMBIENTAL: ANÁLISE DA FLEXIBILIZAÇÃO DA LEGISLAÇÃO SOBRE O USO DE AGROTÓXICOS

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Abstract

This article presents the Principle of Prohibition of Retrogression with emphasis on the loosening of legislation on the use of pesticides. The objective is to analyze the reflexes of the Principle of Prohibition of Socio-environmental Retrogression to fundamental rights. Special emphasis was placed on the intangibility of Human Rights, the concept of the principle of non-regression and the Socio-Environmental Rule of Law. The article also aims to understand the consequences of the use of pesticides in Brazil and their effects on fundamental rights (right to food, health, ecologically balanced environment, among others). This study identifies how the loosening of legislations on the use of pesticides violates the Principle of Prohibition

Resumo

Este artigo apresenta o Princípio da Proibição do Retrocesso com ênfase na flexibilização da legislação sobre o uso de agrotóxicos, buscando analisar os reflexos do Princípio da Proibição do Retrocesso Socioambiental nos direitos fundamentais, notadamente à intangibilidade dos Direitos Humanos, ao conceito do princípio da não regressão e ao Estado Socioambiental de Direito. Ademais, visa compreender as consequências do uso dos agrotóxicos no Brasil e seus respectivos efeitos ao direito à alimentação, à saúde e ao meio ambiente ecologicamente equilibrado, entre outros). O estudo identifica como a flexibilização da legislação sobre o uso de agrotóxicos viola o Princípio da Proibição do Retrocesso. Assim, a hipótese reside na necessária atuação estatal para implementar,



of Retrogression. Thus, the hypothesis is that the State's involvement and its actions are fundamental to guarantee, protect and preserve fundamental and environmental rights. The method to be used is the hypothetical-deductive, with the realization of a bibliographical research. Finally, it is concluded that environmental protection cannot have setbacks, being a limiter of state power.

Keywords: prohibition of retrogression; fundamental rights; socio-environmental state; pesticides.

garantir, proteger e preservar os direitos fundamentais e ambientais. O método a ser utilizado é o hipotético-dedutivo com a realização de pesquisa bibliográfica. Por fim, conclui-se que a proteção ambiental não pode ter retrocessos normativos e operacionais, sendo um limitador do poder estatal.

Palavras-chave: vedação de retrocesso; direitos fundamentais; estado socioambiental; agrotóxicos.

Introduction

The consolidation of the Principle of Prohibition of Environmental Retrogression is extremely important for today's society, in a context of intense complexity and the dilemma experienced by humanity in the face of the continuous devastation of natural resources resulting from anthropic action on the environment.

Environmental degradation caused by human actions operates globally and interferes in contemporary social relations, compromising individual and collective well-being substantially. In this sense, the moment is decisive and points towards the affirmation of rights already established, starting from environmental protection over the normative web of fundamental rights (and duties).

The environmental issue as a fundamental and human right has undergone several transformations over time in response to environmental challenges faced by humanity, with various social, political, legal, and cultural changes. The trajectory of this evolution involves different milestones and significant moments, such as the 1948 Universal Declaration of Human Rights (UDHR), which included the environment in the list of human rights; the 1972 Stockholm Conference, which was based on environmental degradation caused by industrialized countries, and the integration of the environmental issue into the Constitutions by international treaties and conferences.

With regard to the difference between the fundamental right and the human right to the environment, both are interconnected, as they refer to the same

principle related to the protection to the environment as a basic and essential right for life and human dignity. The fundamental right to the environment is that recognized by constitutions and legislation at the national level, while the right to the environment as a human right refers to the inclusion of the environment in the international context, as in the UDHR.

Enshrining the legal disposition to a balanced and healthy environment as a fundamental right is recognized by several Constitutions worldwide. This acknowledgement occurs in view of the vital nature of environmental quality for human development at levels compatible with the principle of human dignity.

According to the majority doctrine and jurisprudence, the 1988 Brazilian Constitution, in its art. 225, head provision, combined with art. 5, § 2, recognized and endorsed environmental protection in the list of the individual's and community's fundamental rights, in addition to establishing it as one of the State's fundamental tasks. The so-called "constitutionalization" of environmental protection was inserted in its own title, called "social order" of the Brazilian Constitution.

The acknowledgement of the environment as a human right at the international level caused its normative intangibility, demonstrated through the application of the Principle of Prohibition of Social Retrogression. Given this premise, it is important to consider the Socio-Environmental Rule of Law that was born after the Liberal State, with the aim of ensuring the social legal order and solve environmental problems effectively, combining the social and the environmental in the same protective vertex of fundamental rights.

In Brazil there is a clear trend of legal and administrative decline in the levels of protection to the environment, with attempts to violate the constitutional guarantees of ecological balance, such as the Bills No. 195/21 and No. 2168/21, which make the Forest Code more flexible; No. 6299/2002, which makes the use of pesticides more flexible, and No. 364/19, which impacts the Atlantic Forest Law. Faced with this worrying scenario, it is undeniable that a change in the direction of environmental regulation needs to be adopted, especially regarding the work of the Legislative, Executive, and Judiciary Powers. In the course of this work, it will be demonstrated how the Public Power can direct its actions in favor of guaranteeing an ecologically balanced environment.

Consequently, it will be addressed that the State should not sponsor threats to Environmental Law, as it has been happening since the last government with speeches favorable to the reduction of environmental obligations, justified by politicians and public authorities as necessary measures for the country's economic

growth; deregulation of environmental matters; reduction in the scope of the rights to information and popular participation; reduction or ineffectiveness of legal and administrative rules in force; attacks on environmentalists, and many other imminent threats.

One intends to demonstrate the possibility and the need for immediate application of the prohibition of retrogression clause for the maintenance of the levels of environmental protection already achieved and guaranteed by the national legal system, as a guarantee of the right attributed to the plural subject over a common good; otherwise, in the near future, the negative effects of human activities on the ecological balance, the environment and the peoples' health will be maximized.

In this sense, the relaxation of legislation on the use of pesticides compromises the legal advances already achieved, violates the prohibition of retrogression clause and compromises the effectiveness of fundamental rights. Even if Brazil adopts the Principle of Prohibition of Retrogression, it is necessary to reaffirm the non-regression by action or omission that the legal norms for protection to the environment have already achieved and conquered. Furthermore, the prohibition of reversibility in the social sphere is used as a basis for the application of fundamental rights and guarantees.

Therefore, there is an urgent need for immediate, effective, and efficient measures to protect the biodiversity of genetic heritage, in addition to closing gaps in legislation and in environmental protection mechanisms, especially with regard to making the use of pesticides more flexible, considering that much damage caused may be irreversible. As an example of this irreversibility, one can cite the extinction of various species of fauna and flora, the contamination of springs, the transformation of rivers into sewers, and so on.

The research problem is delimited from the analysis of the Principle of the Prohibition of Retrogression, specifically focusing on the relaxation of the legislation on the use of pesticides, which violates fundamental rights, and on the prohibition of socio-environmental retrogression clause, in addition to demonstrating how State action can influence levels of ecological protection in a direct manner.

For the analysis of these questions, the hypothetical-deductive method will be used, which aims to eliminate errors based on a hypothesis, which in this study resides in the State's role as a crucial guarantee to carry out an environmental regulation that protects fundamental rights and ecological preservation and diversity of life forms.

The relaxation of legislation on the use of pesticides is an open door with a warning signal for the retrogression of the right and to catalyze the occurrence

of more ecological damage, capable of harming considerably the lives of present and future generations. Environmental policies need and must direct convergent guidelines for sustainable development, implementing in an effective manner the proper conditions for a healthy, protective, restorative, and conservationist life of the environment and biodiversity, prohibiting all forms and types of normative and practical regression.

1 Intangibility of human rights and the principle of non-regression

The principle of non-regression aims to ensure that sustainability is not compromised by legislative setbacks, thus guaranteeing the rights already normatively established, that is, making it impossible to create and/or amend a law or administrative act that is harmful to the already existing rights and guarantees. The principle of non-regression is considered an integral part of sustainability (CARNEIRO, 2014).

The principle of non-regression is not explicitly expressed in human rights conventions (COOK, 1990). The enshrinement of the environment as a human right took place after several legal and similar reforms at national and international level, and was announced in the terms of the Universal Declaration of Human Rights, proclaimed by the United Nations General Assembly in 1948 in the city of Paris, and declared by the Human Rights Council in April of the same year, that access to a “clean, healthy and sustainable environment” is part of human rights (UN, 2020).

The establishment of the environment as a human right opposes the regression of Environmental Law in the name of the effectiveness and intangibility of human rights. The non-regression of human rights is implicit in ethics, morals, and the judiciary. Its purpose is to establish the protection to human rights in addition to favoring social progress and better living conditions, prohibiting the destruction or limitation of fundamental rights by the States (UN, 2020).

Positive obligations imposed on the States have thus emerged, especially in the environmental field. Positive obligations descend from a fundamental right, and non-regression is a negative obligation. Different international human rights texts show the progressive nature of economic, social, and cultural rights, which are often associated with Environmental Law. The non-regression obligation or non-regression duty can be easily inferred from this progressiveness.

Among some pacts and conventions that address the protection to rights and the prohibition of regression, we highlight the International Covenant on

Economic Rights, the European Convention for the Protection on Human Rights and Fundamental Freedoms, the 1969 American Convention on Human Rights, and the Protocol of San Salvador.

The 1972 Stockholm Conference was also an important milestone in the international recognition of the environmental issue as a global concern. The Stockholm Declaration and the resulting Plan of Action highlighted the importance of protecting the environment and its relation to sustainable development (MILARÉ, 2011).

The provisions that reinforce the obligation of non-regression aim at a more protective system with a guarantee of evolution towards progression, without retrogression and against regression that aims to limit and prohibit rights, especially environmental ones. In this regard, the intangibility of human rights is embodied at the international and national levels, and its repercussions occur inevitably in Environmental Law, due to the quality of a new human right, whose nature cannot regress (PRIEUR, 2012).

The substantial intangibility of Environmental Law may give rise to fewer objections and resistance than the application of the principle of non-regression in the social sphere. This idea of ensuring continuous and progressive development of the way in which environmental rights are exercised to maximize their effectiveness seems to be utopian. The major effect is zero pollution, even though this is impossible. Nevertheless, there is an important “wobble room” between zero pollution and reducing existing pollution using the best available technologies. In this way, environmental non-regression is at the crossroads between depollution (thanks to scientific and technological progress that will develop over time) and the minimum level of environmental protection that is also evolving. Current setbacks are not necessarily the setbacks of yesteryear (PRIEUR, 2012).

According to Prieur (2012), the principle of non-retrogression with regard to Environmental Law in Natural Law should be based on the constitutional recognition of the human right to a healthy environment based on stony clauses, that is, non-revisable constitutional norms or on unwaivable fundamental rights.

The 1988 Brazilian Federal Constitution contains broad provisions on the environment, even though it does not enshrine it in a specific title related to fundamental rights and guarantees. The doctrine maintains that the rights concerning the environment constitute fundamental rights both materially and formally; therefore, these rights are considered acquired, immutable rights, of which the environment is a part.

Thus, it is inferred that there is an interconnection between human rights

and the environment, because without human rights there is no efficient and effective fulfillment of environmental protection, on the contrary, without environmental protection there is no protection of life, of social well-being and its integrity, and human rights may lose their central function (SARLET, 2010). Non-regression is a necessity to safeguard the future of the right to an ecologically balanced environment.

2 The Socio-Environmental Rule of Law

This study will briefly address the transition from the Liberal State to the Socio-Environmental Rule of Law, with emphasis on the fundamental right to a balanced environment as a limiter of state power in the Socio-environmental Democratic Rule of Law.

Human relationships go through several adaptive processes, resulting in inter-human relationships in the social space. From the interaction of the natural and cultural, the environment and its importance are negotiated. According to Sarlet (2010), the economic models presented in the past are an illusion of social well-being, because environmental degradation and crisis were established worldwide through the Industrial Revolution.

The construction of the Socio-Environmental Rule of Law does not represent the origin of the political-legal state community, and it is just the continuation of a long journey marked by deep conflicts, advances and setbacks, which began under the Liberal State's aegis, although its origins have been more remote. The starting point of the Liberal State is the break with the French Revolution, given the restriction of freedom caused by the previous oppressive order (SOARES, 2012).

The French Revolution was considered the revolution of its time, with a predominance of liberal ideology forming the politics and economy of the nineteenth century (HOBSBAWN, 1979). It had its end mainly by the poor peasants allied with the nascent bourgeoisie. The French Revolution only served the bourgeois (merchants and landowners) who sought to pursue their interests in the pre-revolutionary Police State, preventing the social justice desired by the peasantry from being carried out, in addition to not fulfilling the promises of security, legality, and solidarity (COMPARATO, 2001).

When entering a new order inaugurated by the Liberal State, the participants' actions meant the promotion of their interests. In the liberal model, Constitutionalism was concerned with the limitation of freedoms by state power; and

power—inseparable from the state order—was expressed, from the beginning, in modern constitutional theory as the greatest enemy of freedom (BONAVIDES, 2009).

The Liberal State characterized the Constitutions of that period, with the protection and guarantee of fundamental rights to individuals, who were free to exercise them. Over time, the Liberal State began to show failures and inability to guarantee a free and egalitarian State. The liberties defended in the past are embodied in the liberties of the bourgeoisie, which were exercised for their ideals.

Therefore, the Liberal State contributed to the formation of civic and citizen awareness of the modern State, in addition to universalizing the guarantee of rights. However, a model adequate to all was essential. A model that guaranteed the indiscriminate participation of all in the formation of the state will, that is, a more democratic model was needed (BONAVIDES, 2009).

The Socio-Environmental State and the Liberal State are two different models of State. As Canotilho (1996, p. 156; our translation) teaches, “the ‘State of the Environment’ is not a police State, limited to ensuring the existence of a legal order of peace and trusting that also free play between individuals—that is, an ‘invisible hand’—solves the problems of the environment”, that is, the duty of solving the problems of the environment in which we live should come from everyone, not just from the state agencies. On the contrary, the Socio-Environmental State plays an active role and promotes fundamental rights, especially in the protection to the environment. According to Teixeira (2006), the State must position itself in defense of the environment as an interventionist, implementing public policies that solve the environmental crisis.

The term “Socio-Environmental State” has several expressions, such as: Ecological Constitutional State, Environmental Rule of Law, State of the Environment, and Environmental State, among others. The predilection for the adjective “socio-environmental” occurs because it is a common point in the legal-political project for human development and for the social and environmental “agendas” (SARLET, 2010).

According to Canotilho (1998), the terminology “contemporary (Socio-Environmental) Rule of Law” has the following fundamental interconnected dimensions: legality, democracy, sociability, and environmental sustainability; its qualification of State as a Socio-environmental State presents two prominent legal-political dimensions: the obligation of cooperation between States guided by the requirements of ecological sustainability, and the assumption of responsibility by public authorities towards future generations.

However, and beyond the States, environmental protection encompasses the cooperation of individual citizens and social groups, as it takes into account the environmental awareness of those involved. When there is no effective protection to the environment, the State can use repressive instruments for this effectiveness, even if it restricts the individual's freedom (SARLET, 2010).

In order to promote the protection to human dignity in the face of new environmental risks and the lack of guarantees generated by the current technological society, the Rule of Law should, through democratic institutions, be capable of bringing together the fundamental values and guarantees of citizens in a same path of combined efforts aimed at the safety and protection to life with full environmental quality for citizens, also covering the responsibilities and future consequences of the use of certain technologies (SARLET, 2010).

The Environmental Rule of Law is necessary for environmental protection and helps protect human dignity. Faced with the dimensions of fundamental human rights, there is a materialization of different reflections of the principle of human dignity, the central basis of contemporary Constitutionalism, therefore, of the Socio-Environmental State (SARLET, 2010)

The 1988 Federal Constitution establishes in art. 225 the environment as a fundamental right related to the human being's dignity, a corollary of the current model of Socio-Environmental Rule of Law (BATTALINI, 2015). Traditional doctrine classifies the right to a balanced environment in the list of third generation rights (fraternity, or solidarity), and as a diffuse right (THOMÉ, 2014). The axiological-normative framework of the Socio-Environmental Rule of Law is based on the constitutional principle of solidarity and also on freedom and equality for the establishment of the principle of human dignity. In view of this, there is a link between States and individuals to achieve a dignified and healthy life for all (MIRANDA, 2003).

3 Principle of prohibition of socio-environmental retrogression

The theory of risk society, of sociologist Ulrich Beck (2010) portrays well this transition from the modern to the postmodern era, analyzing the socio-environmental impacts of decisions taken that disregard risks. The consequences of the risk society necessarily raise dialogues, debates, discussions, and exchanges of knowledge. Undoubtedly, the state role is fundamental to avoid these risks to the environment.

The state obligation for sustainable development in the Socio-Environmental

Rule of Law has a double character: positive and negative, as the state is obliged not to violate the environmental guarantees already achieved (THOMÉ, 2014).

The Federal Constitution addresses, in its first articles, the basic principles for the Brazilian political system. Among these devices, one can mention the dignity of the human being and cooperation between peoples, stony clauses to be followed by the state entity.

Still within the framework of the Federal Constitution and the duty of the Public Power, there is art. 225, head article, which deals with the protection and preservation of a balanced environment for present and future generations. As a result, the State's duty to intervene in environmental protection is undeniable, especially when legislation has been reversed, exercising constitutionality control based on the prohibition of retrogression clause (THOMÉ, 2014).

Regarding the aspects of prohibition of retrogression, one considers, mainly, the State's obligation not to commit setbacks in the environmental legislation, guaranteeing adequate living conditions for the population, respecting the principle of human dignity and the protection to the environmental heritage.

To understand how the Principle of Prohibition of Socio-Environmental Retrogression is implemented, it is necessary to contextualize the evolution of the principle based on the prohibition of social retrogression, bearing in mind the close relationship between fundamental social and ecological rights.

According to Canotilho (1986), the Principle of Social Retrogression, also called "prohibition of social counter-revolution", derives from democratic, economic, and social principles. This means that social and economic rights, after being conquered, become an institutional guarantee and a subjective right. Thus, the irreversibility of social achievements is based on the principles of social and economic democracy, an immediate claim by citizens against public entities that affect negatively some degree of enjoyment of their economic and social rights, establishing a ban on "reactionary evolution", which justify the sanction of unconstitutionality against norms that evidently destroy the so-called "social conquests".

The Principle of Prohibition of Social Retrogression in the doctrinal and jurisprudential scope in Brazil is still "recent". One of the first Brazilian constitutionalists to address this issue more cautiously was José Afonso da Silva (DERBLI, 2007). The constitutionalist argues that social rights are fundamental rights in the Democratic Rule of Law, pursuant to art. 5, § 1 of the 1988 Constitution (SILVA, 2009). In this way, social rights begin to have maximum applicability in the national legal system.

According to Silva (2009), programmatic constitutional social norms are

linked to the legislator, making it impossible to reverse them once implemented, that is, the constitutional prohibition of indirect social retrogression is admitted (SILVA, 2009). For Barroso (2002), pragmatic norms and guarantees of constitutional rights result from the prohibition of retrogression and refer to the principle arising from the constitutional legal system, which is consolidated by the idea of prohibiting the suppression of regulatory norms of a certain constitutional commandment and that institute related rights.

The author Sarlet (2004), when analyzing the Brazilian legal system, states that the prohibition of social retrogression stems from the right to legal security of the Rule of Law and is linked to the notion of human dignity, since legal instability may affect the protection to dignity.

In the jurisprudential scope, the prohibition of social regression gradually gained ground in the Federal Supreme Court (STF), the issue was addressed for the first time in 2004, through the Direct Action of Unconstitutionality (ADI) No. 2.605-DF, with dissenting opinion, and published on June 4, 2004. This action was intended to challenge art. 17 of Provisional Measure (MP) No. 1911-9/199, which extinguished the National Council of Social Security and the State and Municipal Councils of Social Security. One of the arguments used in the proposal of the ADI was that the MP violated the Principle of Prohibition of Social Retrogression in a direct manner. After that, there were other judgments that addressed the prohibition of retrogression and its gradual jurisprudential consolidation.

From the outset, fundamental rights are considered protected by the prohibition of retrogression clause, especially those that promote social and environmental justice, especially due to the consecutive socio-environmental threats caused by human action (SAMPAIO, 2013a).

To support the protection to environmental rights, Rocha (2020) advocates the use of all theoretical and legal developments related to the protection to social rights that are at a much more developed stage. For the author, there are normative and content similarities between social and environmental rights, which justifies their convergence, especially in the development of normative mechanisms to combat the reduced effectiveness of the norms that protect environmental rights.

The effectiveness of the protection to fundamental rights is directly related to the prohibition of retrogression by going beyond the scope of fundamental social rights. After guaranteeing the third generation constitutional rights, in which the balanced environment is inserted, the scope of protection to fundamental rights is expanded and liberal and social rights are maintained (SARLET, 2004).

The doctrine is still hesitant to describe the terminology about the risk of “non-retrogression”. In some countries, other terms are used for the principle, for example in Belgium, where the term used is “stand still”, while in France the concept of “cliquetanti-retour” is employed. In English, the expression used is “eternityclause” or “entrenchedclause”, and in Spanish the expression is “prohibición de regresividad o de retrocesso”, whereas in Portuguese it is “proibição de retrocesso” (PRIEUR *et al.*, 2012).

Still according to Prieur *et al.* (2012), there are other expressions for the prohibition of retrogression clause. The term used by him is the “principle of non-retrogression”, because it is not a common clause and because it is a generic principle of Environmental Law, which safeguards rights and achievements obtained to avoid or limit the deterioration of the environment, in addition to imposing on entities public protection to this common good.

In this sense, the 1988 Federal Constitution addresses the aforementioned theme in line with the linguistic and semantic-normative content at international level, a contribution from the emergence of the environmentalist culture and ecological precepts, enshrining, in its own chapter, the right (deontological and legal duty) to the ecologically balanced environment.

The prohibition of retrogression clause in the Socio-Environmental Rule of Law goes beyond social issues, essentially combining environmental aspects, given that ecological damage, damage to biodiversity and/or the reduction of environmental protection consequently makes socioeconomic conditions worse, pushing back the humanity’s sustainable development. In this way, the prohibition of retrogression is not only social in character, but has a socio-environmental projection, being an important legal instrument for the transition from reflexive modernity to the new modernity, in view of its framework intended for maintaining the environmental (and social) existing achievements (THOME, 2014).

In this perspective, there was a recent case judged in the STF about the Principle of Socio-Environmental Retrogression. The topic dealt with was the Argumentation of Non-compliance with the Fundamental Precept (ADPF) 651, which had as its object the Presidential Decree that changed the composition of the deliberative council of the Fund for the Environment (FNMA) and withdrew the participation of civil society. Among the arguments used for the final verdict and annulment of the Decree, the affront to the Principle of Prohibition of Institutional Retrogression in environmental matters and the need for civil society participation in the creation of environmental public policies stood out.

The binding of the non-retrogression clause in Environmental Law is applied

in these cases of “deregulation” (PRIEUR, 1987). In terms of protection, the environment is of the humanity’s collective interest, in addition to being enshrined as a human right; therefore, legislation has to advance in order to guarantee this protection and oppose normative regression.

Faced with the purpose of Environmental Law, the intangibility of human rights and the need for the principle of immutability, the State, as regulator and executor of the legal norm, has the duty to promote non-regression (basic principle of Environmental Law) and rely on others already known principles: popular participation, polluter-payer, protector-receiver, prevention, and precaution, among others (PRIEUR *et al.*, 2012).

Therefore, the environmental protection duties entrusted to the State are linked to the State powers, limiting its freedom to adopt legal and administrative-normative legislative measures related to the regression of protection, conservation and recovery of the environment and biodiversity.

4 The use of pesticides in Brazil

Usually, pesticides are conceptualized as synthetic products used to eliminate pests (insects, larvae, fungi, ticks) and control diseases caused by these vectors to regulate the growth of vegetation in the rural and urban environment (INCA, 2021).

Studies demonstrate the environmental imbalance caused by the use of pesticides, causing negative impacts on biodiversity and ecosystems, such as strengthening the resistance capacity of pests and the emergence of more resistant species, requiring increased doses applied or the use of new products that are even more aggressive to the biosphere, with consequences that affect communities of insects that control these disease vectors in a direct manner (ALMEIDA *et al.*, 2017).

There is a direct influence on the predator-prey interaction, and the natural enemies are not the only ones affected by pesticides (HANLON; RELYEA, 2013). An example of a pesticide that affects directly and indirectly non-target organisms is the specific use of the chemical glyphosate (SARAIVA *et al.*, 2015). In the scientific community, there are several questions about its use and with proven investigations, mainly because of its effects on natural enemies (BASTOS *et al.*, 2007).

Bastos *et al.* (2007) and other authors claim that there is no specific critical season for weed competition, which makes them important to maintain and harbor natural enemies in the system. However, the author states that, even though there is no specific period of competition between weeds, there are sometimes

spraying unnecessarily or in overdoses in most agricultural crops, with direct influence of the pressure of agriculture on the ecosystem, causing disruption in the balance of biodiversity.

The use of pesticides contaminates the soil, water and food, in addition to contributing to the destruction of fauna and flora, and the population becomes sick, among others, directly compromising bodies and territories and violating fundamental human rights. Pesticides are also used as chemical weapons for deterritorialization, especially of traditional communities (FLORES, 2019).

Struggles for the enjoyment of human rights seeking to restrict, in a normative manner, violations of the use of pesticides in Brazilian agricultural production are moving at a slow pace, in a totally opposite direction to the accelerated dynamics of the technology that develops, manufactures, and markets pesticides. In the National Congress, there are difficulties to implement more restrictive norms, and Law No. 7.802/1989 (Pesticides Law) is constantly attacked by the attempts to reform and/or revoke it with amendments, some examples in progress in the National Congress are Bill No. 1.549/2022 and Bill No. 6.299/2002, called the Poison Package (CAMPANHA PERMANENTE CONTRA OS AGROTÓXICOS E PELA VIDA, 2021).

With regard to the world consumption of pesticides, 2013 data from the UN Food and Agriculture Organization (FAO), reveal that Brazil, at international level, was the country that spent the most on pesticides, with about US\$ 10 billion in relation to the use of pesticides per hectare; in another survey carried out, it was shown that Brazil ranked seventh, with a total of US\$ 137 per hectare; regarding chemical expenses due to the size of agricultural production, the country was in thirteenth place, with US\$ 9 per ton (FIOCRUZ, 2019).

Nevertheless, Fiocruz (2019) states that there is no way to compare the amount of hectares of planted area in Brazil with that of other countries, as the Brazilian territory has a vast planted area that uses a large volume of pesticides. In the same sense, Fiocruz (*apud* BOMBARDI, 2019) states that the data do not reflect the country's reality, as those hectares are considered cultivated area up to pasture regions, which are unproductive lands.

The multinational manufacturers of pesticides also differ in relation to the data: Bayer in Brazil claims that the country does not deserve the title of largest consumer, since the large volume of pesticides used in crops is due to the fact that the country is a large producer and has several harvests per year. Syngenta (2021) points out that Brazil really is the biggest consumer, but there is a distortion of reality, since the country has two and a half harvests per year, which contributes to

the use of chemicals. However, regarding this information, Syngenta's press office diverges and states that the information about Brazil being the largest consumer in the world is 'false' (FIOCRUZ, 2019).

The reality is that there is no international monitoring of the use of pesticides in the world, which makes ranking difficult, as each country uses different methodologies and there is difficulty in making scientific comparisons. In this bias, the most important thing is not to compare data and survey rankings but to analyze the effects caused by the indiscriminate use of pesticides. Data from 2015 to 2017 from the Ministry of Health reveal that in Brazil there are more than 80,000 notifications of poisoning related to exposure to pesticides (FIOCRUZ, 2019).

According to Carneiro *et al.* (2012), several actives used in Brazilian crops are *prohibited* in the European Union. According to data from the National Health Surveillance Agency (2011), several types of food had residues of prohibited ingredients and other levels above what is allowed in the country, which demonstrates a mismatch between agricultural production in Brazil and the preservation of human rights.

5 Flexibilization of the use of pesticides and violation of the principle of prohibition of retrogression

Environmental impacts, as a rule, do not occur in the short term or in an immediate and individualized manner, on the contrary, they commonly affect society with long-term occurrences. The consequences of these environmental impacts, in general, threaten human health and the environment, affecting human dignity (THOME, 2014).

Ulrich Beck (2010) records that in the choice between death by hunger and death by intoxication, the fight against material misery is imposed. We currently live in a "risk society", as the author states, and environmental impacts should be evaluated considering social problems, since environmental issues are intrinsically related to social issues, and it is not possible to talk about environmental protection without considering other serious problems, such as hunger and poverty.

According to Thomé (2014), studies have found that the population of peripheral countries suffers or will suffer most of the negative impacts caused to the environment, since the enterprises that generate high risks are in peripheral countries or are transferred to them, and the poorest people are the first affected by environmental degradation.

The negative impacts caused to the environment and their resulting effects

affect individual and collective well-being (THOMÉ, 2014). From this perspective, social rights are no longer guaranteed and maintained when, for example, there is no access to drinking water, there is no choice in relation to not using chemically contaminated food, when houses are built on contaminated land, and climatic events occur that cause the interruption of life (THOMÉ, 2014).

In a decision by the Superior Court of Justice (STJ), Minister Eliana Calmon states that the environment is based on fundamental rights, as it is an unavailable and fundamental legal asset, prior to other rights, because without it there are no other fundamental rights (BRASIL, 2009). In the same sense, another decision relates the use of pesticides and the principle of prohibition of retrogression—ADPF No. 656, which provides that the entry, registration, and release of new pesticides without examining the possible harmfulness of the products violate the principle that prohibits retrogression in socio-environmental matters.

The reduction of legislative protection to fundamental rights in certain countries occurs under various arguments, with discursive predominance that deals with the need for flexibility in the face of the economic crisis situation and the resulting insecurities. However, Sampaio (2013a, p. 392; our translation) asserts that there is “[...] resistance both from the claims of the principles of human dignity and social justice already sufficiently entrenched in political theory [...]”. And, also, by virtue of the awareness of minimal solidarity—at the regional and international levels—of the protection of human rights and of positioning by the courts of constitutional justice of some States, mainly European ones. Because of this resistance, the Principle of Prohibition of Social Retrogression came to have several terminologies, as previously mentioned.

Having an ecologically balanced environment is a right of all citizens, just as preservation is everyone’s duty. Because this right has a transindividual character, the original constituent legislator opted for a chapter dedicated to the environment, a transindividual prerogative that is even recognized by the STF as a right to the integrity of the environment (THOMÉ, 2014).

In Brazil, despite the establishment of a balanced environment as a fundamental right, there is an undeniable tendency to make environmental protection legislation more flexible, resulting from pressure from groups concerned with their own interests and with economic growth at all costs, not caring about development as collective right. By analyzing the legislative text, this trend can be seen in Decree No. 10.833, of October 7, 2021, which anticipated implicitly several points of Bill No. 6.299/2002 (Poison Package), making the registration of pesticides more flexible in relation to what Decree No. 4.074/2002 establishes,

flagrantly out of line with the constitutional precepts that govern the Socio-Environmental Rule of Law.

It is important to remember that the aforementioned Decree was signed in the same month as the World Climate Conference (COP-26), that is, despite the fact that most politicians declared the urgency of modifying the current agricultural model, it was demonstrated that, for the government, environmental issues are irrelevant, as are the population's health and well-being, and that Brazilian agriculture is eminently dependent on chemicals, violating the prohibition of socio-environmental regression clause in an express manner (ARINI, 2021).

The changes brought about by Decree No. 10.833/2021 hinder access to information, public debate, and allow highly carcinogenic pesticides to be registered, which may cause various health problems in the general population, being a clear violation of the principles of Environmental Law and the Democratic Rule of Law (CAMPANHA PERMANENTE CONTRA OS AGROTÓXICOS E PELA VIDA, 2021). In addition, it has been shown that there is a preference for commodities and agribusiness over the production of food without pesticides accessible by the population (ARINI, 2021).

Given the serious consequences for human health, the environment and workers, the Permanent Campaign Against Pesticides and for Life (2021) issued a Technical Note, signed by several civil society entities and institutions, highlighting the consequences of Decree No. 10,833/202, reporting: (1) lack of assessment of the impacts on the environment and human health, of the use of pesticides on the banks of railways and highways, oil pipeline crossings and other locations, even some being close to springs; (2) no obligation to evaluate active ingredients already registered for efficiency and practicability; (3) no provision for periodic analysis of registered products; (4) the priority list of low dangerousness and toxicity records is now defined by the Ministry of Agriculture, Livestock and Supply (MAPA); (5) less transparent presentation of registration requests and processes; (6) adoption of the Globally Harmonized System – GHS, which places pesticides in toxicological classes that do not match their chronic damage; (7) withdrawal of the Ministry of Health's obligation to assess and evaluate the effectiveness of pesticides, and (8) change in the deadline for the evaluation and registration of new active ingredients by MAPA. Although the technical note mentions the various types of environmental retrogression, the principle of prohibition of socio-environmental retrogression was not used.

No less important to point out, the aforementioned Technical Note states that Decree No. 10,833/2021 opposes what international consumer markets demand,

such as supply chains free from forest destruction and the use of pesticides. It also demonstrates that the European Community, in 2019, modified the legislation and began to prohibit the registration of pesticides associated with the same effects as those foreseen in the Pesticides Law, clearly highlighting the retrogression caused by this decree and the Poison Package (CAMPANHA PERMANENTE CONTRA OS AGROTÓXICOS E PELA VIDA, 2021).

By anticipating several points of the Poison Package, the Presidential Decree is considered illegal and unconstitutional in form and content, as it violates fundamental rights guaranteed by the Federal Constitution, such as the right to food, the right to health and an ecologically balanced environment, in addition to usurping the competences of the Legislative Power expressed in the Federal Constitution and in Law No. 7.802/1989.

In the same wake of the Poison Package Bill and Decree No. 10.833/2021, there is the Bill No. 3.200/2015, which deregulates and amends the Pesticides Law and its regulation, enshrined in Decree No. 4.074/2002, contributing to maximizing short- and long-term social and environmental impacts, generated by the indiscriminate use of pesticides, and is also considered a retrogression to the legislative achievements covered by the current Pesticides Law (ALMEIDA *et al.*, 2017).

The use, commercialization and relaxation of legislation regarding pesticides should be closely monitored by the State, given the potential damage caused to human health and ecosystems. A normative act cannot ignore or reduce the State's ability to protect the population and the environment. Furthermore, one cannot fail to consider that those most affected by these changes are the most vulnerable in the production chain, that is, workers and other exposed people.

It should be noted that the retrogression and violation of rights caused by the publication of Decree No. 10.833/2021 is not an isolated action by the current government in recent years: burning, deforestation, dismantling inspection bodies, and making the use of pesticides more flexible are some of the many examples.

Undoubtedly, the prohibition of regression clause aims to preserve the normative blocks established in the legal system, particularly according as it aims to ensure the enjoyment of rights, guaranteeing the control of acts that may suppress or restrict fundamental rights. In this sense, it guides and limits explicitly the Public Power's conduct to avoid reducing the levels of environmental protection already established in the legal system (THOMÉ, 2014).

Starting from the same idea of solidarity between state entities and society,

and taking into account its inherent interactional dimension, it is necessary to consider that the relationship between “rights” and “duties” is materialized in the principles of sustainable development driven by it, which is a constitutional imperative that transcends individual and collective rights to implement a socioeconomic development model that combines protection, recovery, environmental and biodiversity conservation, ecological awareness, and historical-cultural protection and appreciation. The idea of living and developing in an ecologically balanced environment implies the responsibility and obligation to protect and guarantee favorable environmental conditions for future generations to live and develop completely (MILARÉ, 1998).

Conclusion

Evidently, it is necessary to be concerned with environmental protection to pass on to present and future generations the minimum vital and existential values. The environment is intrinsically linked to fundamental human needs. However, environmental degradation is increasingly present in rural and urban environments, with deforestation, pollution of streams and rivers, among others.

Recognition of the transversality of human rights is necessary to protect fundamental socio-environmental rights, given the importance of environmental protection for human existence with quality of life and social well-being. Given this, it is also essential to recognize the intangibility of essential human rights to avoid the regression of Environmental Law.

Therefore, the construction and implementation of the Socio-Environmental State is essential for the limitation and existence of the legal order, as the existence of a normative framework centered on the Principle of Prohibition of Socio-Environmental Retrogression, based on solidarity, freedom and equality, is fundamental for the maintenance of the human being's dignity.

Human dignity is closely linked to a balanced environment, going beyond issues of a strictly biological nature, encompassing social, cultural, political, physical, and ecological aspects, among others. The Principle of Prohibition of Socio-Environmental Retrogression is implicitly found in the Federal Constitution, especially in art. 225, which deals with environmental protection.

Despite the principle existence in the legal system, there are several cases of violation that make the legislation on pesticides in Brazil more flexible. Despite the current legislation, Law No. 7.802/1989 and its respective Regulatory Decree No. 4.074/2002, which restricts the use of pesticides, there has been political and

economic pressure for decades to modify these two legislations to make the registration of the use of restricted pesticides in other markets around the world more flexible because they are toxic, in flagrant violation of the socio-environmental regression clause.

With regard to the use of pesticides, even though there are several studies on the harm and damage to health, food and the environment, there is no concern on the part of the Public Power with the potential and concrete damage that poisons cause to the population. The previous Brazilian Federal Government privileged the market and its visionary mercantile speculations to profit at all costs, launching a Decree that anticipates several points of the Bill (Poison Package), which violates, in a clear manner, fundamental rights included in the Federal Constitution.

In view of the analysis of the hypothesis, it becomes evident that the State plays a fundamental role in environmental regulation, exerting significant influence in the protection of fundamental rights and environmental preservation through its policies, legislation and regulatory bodies, promoting coordinated actions that aim to mitigate negative impacts on the environment, thus ensuring the sustainability of present and future generations.

Furthermore, environmental preservation is imperative given the growing pressure exerted on natural resources. Overexploitation, habitat destruction and pollution have threatened biodiversity and jeopardized the stability of ecosystems. In this context, it is crucial for the State to act diligently, implementing conservation policies, promoting inspection and punishing activities that harm the environment.

The conclusion of this study points out that the Socio-environmental Rule of Law, through the Principle of Prohibition of Socio-Environmental Retrogression, aims at environmental preservation and ensures fundamental rights, and in this vein, the Public Power cannot exceed environmental limits to meet the needs of certain groups, mostly formed by multinational companies, without considering the clause of prohibition of the regression limiting state power and, mainly, the negative impacts on the quality of life of the population in general. Environmental protection can never go backwards. Never!

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Authors' participation

Maria Goretti Dal Bosco was responsible for work review and final approval. Thaís Gomes Abreu participated actively in the discussions of the results.

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