PESTICIDE AND SOCIO-ENVIRONMENTAL LAW: UNDERSTANDING OF THE BRAZILIAN SUPREME COURT

AGROTÓXICO E DIREITO SOCIOAMBIENTAL: ENTENDIMENTO DO SUPREMO TRIBUNAL FEDERAL BRASILEIRO

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Abstract:

Agrotoxic is a transdisciplinary theme that also permeates a social and human science of Law and presents a social, an economic and an environmental dimension. The Federal Constitution of 1988 innovates by explicitly consecrating the right to an ecologically balanced environment, (which is) a good of common use of the people and essential to a healthy quality of life, attributing to the public power and the community the duty to defend and preserve it for the present and future generations. Litigation involving the use of pesticides are brought to the Judiciary so that fundamental rights are guaranteed and delivered, in favor of the desired justice. In the light of Socio-Environmental Law, the present study intends to make the descriptive inference of the STF's (Brazilian Supreme Court) understanding of the subject, considering that this is the supreme body of the Judiciary and is responsible for safeguarding the Federal Constitution. To do so, it relies on empirical research and the technical bibliographical and documentary procedure for the construction of the answer to the proposed question. It was concluded that the STF did not construct a consolidated understanding in the light of Socio-Environmental Law regarding the actions on pesticides, and the construction of this knowledge could be facilitated through the academic specialty of the magistrates, in order to constitute the socio-environmental jurisprudence.

Keywords: Agrotoxic; Socio-Environmental Law; Jurisprudence of the Supreme Court of Justice (STF); Agrotoxic Law; Pesticide.

Resumo

Agrotóxico é um tema transdisciplinar que perpassa, também, a ciência social e humana do Direito, e apresenta aspectos sociais, econômica e ambientais do país. A Constituição Federal de 1988 inova ao consagrar expressamente o direito ao meio ambiente ecologicamente equilibrado, bem de uso comum do povo e essencial à sadia qualidade de vida, atribuindo ao Poder Público e à coletividade

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o dever de defendê-lo e preservá-lo às presentes e futuras gerações. Os litígios que tem por objeto a utilização de agrotóxicos são levados ao Poder Judiciário com a finalidade de que os direitos fundamentais sejam garantidos e entregues, em prol da almejada justiça. À luz do Direito Socioambiental, o presente estudo pretende realizar a inferência descritiva do entendimento do STF sobre a temática, tendo em vista que este é o órgão de cúpula do Poder Judiciário e a ele compete a salvaguarda da Constituição Federal. Para tanto, vale-se da pesquisa empírica e do procedimento técnico bibliográfico e documental para a construção da resposta ao questionamento proposto. Concluiu-se que o STF não construiu um entendimento consolidado à luz do Direito Socioambiental no que tange às ações sobre agrotóxico, e a construção deste conhecimento poderia ser facilitada por meio da especialidade acadêmica dos magistrados, a fim de constituir a jurisprudência socioambiental.

Palavras-chave: Agrotóxico; Direito Socioambiental; Jurisprudência do Supremo Tribunal de Justiça; Lei de Agrotóxico; Pesticida.

INTRODUCTION

José Bonifácio de Andrade e Silva, a scholar of agriculture based on the preservationist conception of natural resources, as early as the 19th century expressed his concern about the need to implement agricultural techniques that did not cause significant harm to the environment, without, however, neglecting the economic development (MORAES, 2014). In these terms, the author conquered his space in the national scene as a precursor of the defense of the environment and human health.

However, the last two decades of the twentieth century have been marked by a complex and multidimensional world crisis, whose facets affect all aspects of human dignity, such as health, lifestyle, environmental quality, technology and international politics.

In this way, there is an intense environmental crisis, coming from the society of risk, triggered by the technological and industrial conditions, due to the organization and economic management of the society that is in conflict with the quality of life and with its coexistence with nature.

Pesticide are used daily in Brazil and, because they are chemicals with harmful effects on human health and the environment, they cause damage to society and environmental disasters, if their use is exaggerated. Consequently, conflicts are brought to the Judiciary to remedy the impasses arising from the unreasonable and irrational use of pesticides and, as a rule, aim to safeguard the right to a dignified life.

Considering the theme of this article (pesticides), it is emphasized that the challenge of scientific knowledge is to develop a study from a comprehensive and transdisciplinary

perspective, considering its complexity, without specializing or dismembering the theme, according to Edgar Morin and his Theory of Complexity (MORIN, 2007).

Hence, Law, recognized as a human and a social science, must analyze the subject with multifocal lenses, including the various aspects that are currently involved in the issue (chemical effect, social repercussion, economic aspect, damages to the environment, legal provision), and apply this broad perspective also to cases that are appreciated by the Judiciary (MORIN, 2007).

It should be noted that Socio-Environmental Law is anchored in a holistic and integrative vision of the human being with nature, so that human activities are developed based on the preservation of ecosystems. Socio-environmental is a Latin American construction designed by the Socio-environmental Institute (ISA, in Portuguese) to present integrative solutions to social and environmental issues, in defense of collective and diffuse social and cultural rights and assets related to the environment, cultural heritage, human rights and people.

With this information in mind, one has to question which is the understanding of the STF jurisprudence for the subject of pesticide, considering the bias of the Socio-environmental Law. Through the empirical research, it is sought to make the descriptive inference of the foundations used in the jurisprudence of the Supreme Court (STF, in Portuguese), with the purpose of constructing a scientific answer about the understanding of the subject by the highest instance of the Brazilian Judiciary, examining, on the merits, if the question is based on Social and Environmental Law.

It is worth noting that this article has scientific and social relevance, given that the theme – pesticide - has a potentially harmful effect on fundamental rights, especially regarding vulnerable groups (rural workers, pregnant women, children, indigenous peoples, consumers), since their lives are commonly affected by the indiscriminate use of pesticides.

It is emphasized that empirical research in law is "based on observations of the world - in other words, data, which is only a term for designating facts about the world. These facts may be historical or contemporary, or based on legislation or jurisprudence [...] " (LEE; KING, 2013). In order to do so, data will be extracted from the web-portal of the STF and then analyzed in a summarized way, in order to facilitate the compression of the selected judges and to consolidate the STF's understanding, considering the relevant information that will be presented in the first items of this scientific article.

For this purpose, this scientific research is divided into four topics. In the first one, important aspects that the national doctrine puts in evidence about the Federal Law of pesticides

of 1988 are presented, in order to verify if there are gaps to be faced by the Judiciary and that do not corroborate with the guarantee of the right to an ecologically balanced environment.

In the second topic, we discuss the environmental crisis, the definition and bias of Socio-Environmental Law for pesticides. It is also evaluated in this item the UN Report of 2017, which deals with hazardous pesticides used worldwide, and the environmental-social disasters that happened due to the use of these chemicals.

In the third item, the criteria adopted for the elaboration of the empirical research are indicated, in order to establish the parameters used in this research, such as the terms, the electronic address, dates that the research was carried out, and the presented results for each selected term.

In the next item, the results of the empirical research are discussed, with the purpose of explaining and concluding the understanding of the Supreme Court and concluding the answer to the questioning proposed in this study. Therefore, the study in question will now be outlined.

1 RELEVANT ASPECTS OF THE PESTICIDE LAW OF 1989

The period prior to 1989 (year of publication of the Agrochemicals Law) was marked by relevant facts and encouraged the re-discussion of the need for a Federal Law to regulate the issue of pesticides at a national level and to repeal the obsolete Decree N. 24,114 of 1934. Two facts are worth highlighting in this process, namely, the contamination of the Rio Guaíba of Porto Alegre (state of Rio Grande do Sul) and the murder of Chico Mendes.

In the words of Caroline da Rocha Franco and Victor Pelaez, the "Guaíba River contributed to the insertion of the control of pesticides in the political agenda of Rio Grande do Sul state, the murder of Chico Mendes⁴ and the establishment of the program called Our Nature⁵

⁴ The main legacy of Chico Mendes is the Extractive Reserves, which represent the first initiative to reconcile environmental protection and social justice, anticipating the concept of sustainable development that emerged with Rio 92." MEMORIAL CHICO MENDES Chico Mendes was a Brazilian political activist and environmentalist who died in 1988. **Chico Mendes**. Available at: http://memorialchicomendes.org/chicomendes/>. Access in jan 10th, 2019.

⁵ "In 1972, Sarney stepped up the Senate rostrum and made the first speech in Congress history about the environmental issue. As President of the Republic, Sarney created the "Our Nature" program and later, IBAMA, which centralized all environmental policy in Brazil. Sarney faced several international pressures on the Amazon. Developed countries came to spread ideas that the area should be internationalized. President Sarney recalls a conversation with then-US President George Bush. Sarney says: "It was a very difficult conversation, I asked him if he knew the size of the Amazon. I told him, President Bush, do not think that a fire in the Amazon is like a fire on a Harlem street in the United States." SARNEY, José. **Meio Ambiente no Governo Sarney**. Available at: http://www.josesarney.org/o-politico/presidente/politicas-do-governo/meio-ambiente-no-governo-sarney/. Access in jan 10th, 2019.

explain, mostly, the rescue of the federal law's preliminary draft from political limbo" (FRANCO; PELAEZ, 2017).

Paulo Affonso Leme Machado, who participated in the preparation of the Federal Pesticide Law, asserts that "the Brazilian legislation of 1989 provided for a number of procedures for the prevention and accountability of agents and companies operating in the field of pesticides, reaching innovations in 2000, on packaging and its disposal (VILLALOBOS; FAZOLLI, 2017).

In 1989, Brazil was under international pressure to incorporate the environmental issue into its political agenda. In addition, the Constitution of the Federative Republic of Brazil of 1988, according to Paulo de Bessa Antunes, "brought a great deal of innovation in relation to those that preceded it, notably in the defense of individual rights and guarantees and the recognition of a new range of rights, among which is highlighted the right to an ecologically balanced environment" (ANTUNES, 2017).

The National Pesticide Law nº. 7.809/1989, promulgated after the 1988 Constitution, consists of 23 articles and has been in force for 30 years. This Law governs the research, testing, production, packaging and labeling, transportation, storage, commercialization, commercial advertisement, use, import, export, final destination of waste and packaging, the classification, control, inspection and supervision of pesticides, their components and others.

The Regulatory Decree No. 98,816/1990 (BRASIL, 1990), on the other hand, contains 121 articles, and regulated the Pesticide Law 7,802/1989 for approximately 10 years, according to article 21 of the Federal Pesticide Law of 1989. However, on January 4th, 2002, the President of the country at the time, Fernando Henrique Cardoso, revoked the Decree of 1990 and granted validity, as of that date, to Regulatory Decree No. 4,074/2002.

The current Regulatory Decree, No. 4,074/2002, inaugurated the amendment of the pesticide registration procedure, by establishing a simultaneous analysis of the application for registration by the three responsible federal agencies, which are: Brazilian Institute of Environment and Renewable Natural Resources (IBAMA, in Portuguese), Brazilian Health Regulatory Agency (ANVISA, in Portuguese), and Ministry of Agriculture, Livestock and Food Supply (MAPA). Likewise, it established the registration for export; requested the implementation of the Pesticides Information System (SIA); and established the Technical Advisory Committee on Pesticides (CTA)

The National Pesticides Law is the first Federal Law to discipline the issue at a national level, and its importance is well recognized, although currently, especially in 2018⁶, there has been a strong social and economic pressure to replace this Law.

According to the book "Agrotóxico & Ambiente" (Pesticides and Evironment), published by "Embrapa" (The Brazilian Agricultural Research Corporation), the term Pesticides, nomenclature used by the Federal Law of 1989, "includes all insecticides, fungicides, herbicides, fumigants and other organic components, or some substances destined for use, as a growth regulator, defoliant or desiccant ", and are used, especially in agriculture, with three main objectives: higher productivity, high quality production and reduction of labor cost (SILVA; FAY, 2004, p. 18).

As it is possible to verify from the Federal Law of 1989, the term pesticides is accepted by the doctrine and also by the Brazilian legal system, since it is the most adequate and capable of transmitting the real context and dangerousness of these substances to society.

Aside of the positive decision of adopting the "pesticides" nomenclature, another beneficial aspect of this Federal Law must be highlighted: the attribution of the competence to analyze the application for registration of the chemical, based on the specialty of the federal body.

Regarding the competence aforementioned, we clarify that to IBAMA is given the competence to assess a registration application that "involves the use of pesticides and related substances in water environments, the protection of native forests and other ecosystems"; ANVISA's registration analysis "involves the use of pesticides and related substances in urban, industrial, household, public or collective environments, as well as for water treatment and public health campaigns"; and to MAPA the aptitude for analysis of registration requirements "involves the use of pesticides and related substances in the sectors of production, storage and processing of agricultural products, in planted forests and pastures" (CANOTILHO; LEITE, 2015, p. 292).

For this reason, article 3 states that the registration must be granted by the federal agency responsible for the health sector (ANVISA), the environmental sector (IBAMA) and

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⁶ It is relevant to point out, for the sake of reflection, the conclusion of a publication dated July 18th, 2018 that discusses the pressure for a new Law on pesticides: "Prior to the decision about a new Pesticides Law, the country needs to discuss clearly the reasons for that proposal. If there are problems, will they really be solved by a new law? Isn't the excessive dependence on pesticides in our agricultural systems a problem to be faced? There are structural issues to be discussed, which go beyond the limits of the formal provisions of the law". VALOR ECONÔMICO. Pressão por uma nova lei dos agrotóxicos. Publication published in july 18th By Fabio Feldman and Suely Araújo. Available at: https://www.valor.com.br/opiniao/5666555/pressao-por-uma-nova-lei-dos-agrotoxicos. Access in: jan10th, 2019.

agricultural sector (MAPA), because "it is eminently public and imposed as a social and individual security measure in areas of food, health and environment " (VAZ, 2006, p. 62).

The registration of the pesticide depends on the authorization of the entities that make up the tripartite regulation. In order to understand the competence of each organ and its relation to the registration process, it is necessary to briefly verify the classification of the pesticide and its purpose (herbicides, insecticides, rodenticides, fungicides, among others), so that it can be concluded which organ will register the pesticide in the national territory.

In addition, the pesticide Law of 1989 implements the principle of prevention (article 2, paragraph 6) by prohibiting the registration of certain pesticides in Brazil, providing that:

Paragraph 6 It is prohibited to register pesticides, their components and related substances:

- a) for which Brazil does not have methods to deactivate its components, in order to prevent its remaining residues from causing risks to the environment and public health;
- b) for which there is no effective antidote or treatment in Brazil
- c) that show teratogenic, carcinogenic or mutagenic characteristics, according to the updated results of the scientific community;
- d) that cause hormonal disturbances, damages to the reproductive system, according to procedures and experiences updated in the scientific community;
- e) which are shown to be more dangerous to man than laboratory tests, on animals, have been able to demonstrate, according to updated technical and scientific criteria;
- f) whose characteristics cause damage to the environment (BRASIL, 1989).

However, the above legislative restriction would be complete if it was also prohibited, expressly by law, the importation and registration of pesticides prohibited in their countries of origin, due to scientific evidence of the risks of damage to human health and the environment.

In the words of de José Edmilson de SOUZA LIMA and Larissa MILKIEWICZ (2018, p. 23.):

Although registration is considered to be an indispensable condition for all of the aforementioned elements, it has been possible to establish that federal legislation is ineffective by not imposing a time limit for the re-evaluation of pesticides, from a technical and scientific point of view, taking into account possible damages (abstract risks) that such products cause to the environment and to human health, in which case it is possible to assess a possible violation of the precautionary principle, implied in the Federal Constitution.

Specifically about the absence of veto expressed in Law, Paulo Afonso Brum VAZ (2006, p. 64) highlights:

> This product has already had its registration canceled in the US or Europe because it has proved to be harmful to human health and the environment, but in Brazil it is still allowed. Are Brazilians, our environment, our biodiversity, immune to the effects of pesticides considered harmful in other countries?

In addition to this gap in the Law, the registration of pesticides in Brazil is ad eternum, that is, there is no legal term for the re-evaluation of the chemical, and the reevaluation is foreseen in only two legal hypotheses that are expressed in article 2, item VI⁷, of Decree No. 4,074/2002.

It is important to point out that the possibility of reassessing the granting of registration would contribute to avoid damage to the environment and to human health. Thus, the deadline for reassessment of the registry would help to recognize the effects, especially the negative ones, that are showed after a certain time lapse, after the beginning of the use of the product (FERREIRA; FERREIRA CAVALCANTI, 2012, p. 208).

Thus, the Federal Law of 1989 can be considered outdated in this aspect, since it makes the effectiveness of the principle of prevention difficult, since it does not foresee a deadline for a re-evaluation of the registry. It is recalled that Decree No. 24,114, which disciplined the subject matter in 1934, stipulated, in its article 53, paragraph 2, a validity period of 05 years for the registration of the pesticide (BRASIL, 1934), even though it presented a simple registration procedure. In this perspective, Decree 98,816 of 1990, repealed by the Regulatory Decree in force (No. 4,074/2002), provided that the registration of pesticides would be valid for 5 years and could be renewed at the request of the interested party for successive periods of equal duration (Article 9) (BRASIL, 1990).

Another critical aspect is the fact that Regulatory Decree No. 4,074/2002 does not list the toxicological classification of pesticides (extremely toxic, highly toxic, moderately toxic or nontoxic), as it was foreseen in Decree 98,819/1990 (article 2, Subsection XXXI) (SILVA, 2005, p. 304). Nor is another form of toxicological classification of the products indicated.

However, it must be clarified that the toxicological classification of chemical products registered in Brazil is responsibility of federal agencies (ANVISA, IBAMA and MAPA). The

⁷ Item VI: "to promote the re-evaluation of pesticide registration, its components and related substances

when befalls indications of the occurrence of risks that discourage the use of registered products or when the country is alerted accordingly by international organizations responsible for health, food or the environment, of which Brazil is a member or signatory of agreements."

toxicological classification must be printed on the label of the product with its color, Class I being extremely toxic (red color); Class II highly toxic (yellow color); Class III moderately toxic (blue color); and Class IV slightly toxic (green color) (SILVA, 2005, p. 304).

It is also worth mentioning the Pesticides Information System (SIA), foreseen and required by Regulatory Decree No. 4,074/2002, article 94, which aims to electronically integrate federal agencies (ANVISA, IBAMA and MAPA); provide information regarding the administrative status to the competent federal bodies; allow electronic interaction among producers, handlers, importers, distributors and traders of pesticides; facilitate the grouping of data and information on the marketing of pesticides; providing information to the consumer; and maintain the availability of information on application technology and safety in the use of pesticides.

According to article 96 of Decree No. 4,074/2002, ANVISA is responsible for developing the aforementioned SAI within 360 days, which, after its implementation, will be maintained by the three federal agencies responsible for registration of pesticides: ANVISA, MAPA and IBAMA.

However, to this date, the SIA has not been implemented, despite the fact that the Brazilian Supreme Court of Accounts (TCU) determined, on November 6th, 2017, that ANVISA proceed to the immediate conclusion of the system, under penalty of fine imposed to those responsible for developing the project (TRIBUNAL DE CONTAS DA UNIÃO, 2017).

We clarify that the possible lack of employees in the federal agencies could contribute to the non implementation of the SIA within the period determined by the Decree. However, the Pesticide Information System (SIA) should have been in place for at least 16 years, and it is substantial to society, since it would provide information and data on pesticides at a national level, as well as the respective cautions and recommendations on the correct use of the chemical.

Regarding the aerial spraying of pesticides, Maria Leonor Paes Cavalcanti Ferreira Codonho points out that Federal Law No. 7,802/1989 should regulate the aerial spraying of pesticides by plane. However, the legislation has remained silent on this point, although this is a resource often used in agriculture in large-scale grain production, for example.

About this hap presented by Maria Leonor Paes Cavalcanti Ferreira Codonho, we quote:

It is recalled that the federal law in question does not prohibit aerial spraying of pesticides, an activity known to be of significant risk to man and the environment, which is why it deserves to be regulated with the necessary precaution. Due to the impossibility of controlling the damages of such activity, the principle of prevention is required to make mandatory the prohibition of this activity in the Brazilian territory. Despite this, the federal norm says nothing about it (CODONHO; LEITE, e BENJAMIM, 2014. p. 167.

In addition, regarding the counsel to the federal agencies responsible for granting registration of pesticides and ensuring harmony between the technical-scientific and administrative procedure, Regulatory Decree No. 4,074/2002 establishes, in its Article 95, the Technical Advisory Committee for Pesticides (CTA). The Committee in question must be composed of two representatives – member or his substitute - from each federal agency involved in the pesticide registry, namely MAPA, ANVISA and IBAMA

However, as suggested by Paulo Affonso Leme MACHADO (2016, p. 737), the Technical Advisory Committee for Pesticices should also be composed of researchers and professors employed by the government, which would contribute to the activities to be developed by the two members of each federal body. This suggestion presented by Leme Machado would have the power to guarantee the viability and scientific complexity to the attributions developed by the Committee.

The points highlighted in this item are relevant to the study in question, regarding the positive and negative aspects of the Pesticide Law of 1989, without ignoring other aspects raised by the doctrine. The information presented aims to corroborate the empirical research to be developed below, in order to focus on the understanding of the Brazilian Supreme Court (STF) on the subject of pesticides, from the bias of Socio-Environmental Law.

2 PESTICIDE ANALYSIS UNDER SOCIO-ENVIRONMENTAL LAW

Due to the environmental crisis experienced by humanity, ecological risks received special attention in the social sciences, in order to minimize the effects of this crisis. In short, the so-called risk society theory was developed by the German sociologist Ulrich Beck in the mid-1980s, recorded in the book entitled Society for Risk.

The theory discusses, among other things, the acceptable risk posed by modernity, providing a debate about the complex relationship between man and the environment, since the pillars of the modern conception of civilization can no longer explain the development of science and society. This context is called the crisis of modernity or crisis of paradigms (BELCHIOR; MACEDO, e PACOBAHYBA, 2012, p. 321).

According to the German sociologist Ulrich Beck, the risk society is the characteristic model of society of the last decades and the "environmental degradation and, consequently, the escalation of environmental risks, results from a phenomenon produced by the human intervention

in nature, combined with the growing technological potential used by human beings to reverse the relation of forces between society and Nature" (SARLET; FENSTERSEIFER, 2014, p. 99).

The technological breakthrough from the Industrial Revolution impacted on the social and economic production process, as well as on the way human beings related with nature. This relationship was substantially altered, in order to meet the growing social and market demands. The profits obtained with industrialization solidified the economic system of capitalism, however the human incapacity to manage the natural resources for the survival of the humanity lead to the environmental crisis present in modern society (MOURA, 2012, p. 34).

In this sense, the development of technological, scientific and industrial resources and the process of industrialization are deeply linked to the process of risk production, given the exposure of humanity and the possibilities of being contaminated in many ways, as never seen before. The risks that constantly threaten society and the environment come from generated waste, biotechnology, atomic and nuclear energy, accelerated deforestation that compromises biodiversity and water resources, among others, which are manifested globally in a very significant way (MOURA, 2012, p. 34).

The environmental crisis reveals the ills of modernity against nature, since humans created their environment and expelled the nature from it. The environmental crisis, also described by Carlos Frederico Marés de SOUZA FILHO (2015, p. 90) as "an incredibly human environmental crisis", is present in the life of the whole society through floods, droughts, hurricanes, urban traffic, influenza pandemics, obesity, extinction of species and landscapes, climate change and accumulated waste. Understanding the causes that lead to this crisis is the first step to find the way to overcoming it, and the problem of abusive use of pesticides in Brazil is also inserted in this crisis experienced by humanity.

Following the same doctrinal current of Carlos Frederico Marés de SOUZA FILHO, it is important to emphasize that this crisis is denominated as socio-environmental, especially in Latin America, since it is based on the understanding that the human being was dissociated from the environment.

In this socio-environmental meaning are the observations of Heline Sivini FERREIRA and Ana Paula Maciel Costa KALIL (2017):

[...] it is possible to identify that society is more mature regarding the relevance of not only environmental protection as a legal asset and the importance of preserving it for its own survival, but, above all, of the insertion and recognition of the person as an inseparable part of the environment that must be protected, in view of the indispensable need of humanity.

This socio-environmental definition connects with the understanding of Pope Francis, which was materialized and published in 2015 by the papal encyclical. In the document, it is registered that the solutions of the crisis must be integrated, taking into account the changes of the natural and social systems, in order to take care of the nature. This is justified by the fact that "[...] there are not two separate crises: one environmental and one social crisis; but one unique and complex socio-environmental crisis" (FRANCISCO, 2015, p. 114).

In addition, it is important to highlight that the Socio-Environmental Institute (ISA), founded in 1994, plays a fundamental role in the construction of Brazilian socio-environmentalism, and proposes for this socio-environmental conception crises "integrated solutions to social and environmental issues with a central focus on the defense of social, collective and diffuse rights and assets related to the environment, cultural heritage and human and people's rights" (INSTITUTO SOCIOAMBIENTAL).

Thereby, it can be verified that the socio-environmental vision proposes the reintegration of the human being and nature, with the purpose of turning them part of a whole, in an integrating way, that is, in a relationship of interdependence. In this context, it is important to have the representation of the underprivileged, vulnerable groups, so that their rights are safeguarded before society.

Peticides, used as an essential element for modern agriculture, present externalizations that may manifest themselves in nature and even in the health of the human beings, when their use is abusive or irrational. The effects of this abusive practice began to be investigated by the scientific community, especially since 1960, after warnings materialized in the work entitled 'Silent Spring', writen by Rachel CARSON (2010), biologist responsible for the United States's ecological revolution.

One of the major international documents dealing with the risks that unsafe pesticides pose to human health and the environment is entitled "Report of the Special Rapporteur on the Right to Food", released on January 21st, 2017 and prepared by two human rights experts of the United Nations, Hilal Elver, rapporteur on the right to food, and Baskut Tuncak, an expert on human rights and unsafe substances and waste (UNITED NATIONS HUMAN RIGHTS, 2017).

In the Report, it is shown that the environmental crisis, so called by Ulrich Beck, is socioenvironmental, given that man's greed has led him to build his environment, removing the nature of his natural life and using the environment in an irrational way, without limits and respect to the knowledge of native people, for example.

Thus, the UN Report of 2017 states, among several points, that 90% of the 200,000 deaths caused by acute poisoning by pesticides occur in developing countries, such as Brazil. These fatalities occur where regulations on health, safety and environmental protection are fragile. In addition, chronic exposure to chemicals, agrochemicals, is being associated by the scientific community with cancer and Alzheimer's and Parkinson's diseases, as well as hormonal disorders; development of sterility; and neurological effects on health, such as memory loss, loss of coordination, reduced visual capacity and reduced motor skills. Other possible effects include asthma, allergies and hypersensitivity (NAÇÕES UNIDAS NO BRASIL, 2017).

Regarding the harmful effects on human health, few people are unharmed by the consequences of unsafe pesticides, since exposure may occur through food, water, air, soil and direct contact with the product or indirect contact, through waste, whether by low or high level of exposure to the chemicals.

As reported by the UN, it is possible to list vulnerable groups that are more susceptible to the harmful effects of the uses of pesticides considered to be hazardous. Comprise this group of vulnerable people the agricultural workers, who are poisoned at a ratio of 1 every 5,000 workers; the agricultural communities, which are contaminated because they live in a place close to the pesticide application, either by aerial or terrestrial spraying; children who are involved in agricultural work, who are the most vulnerable to contamination, because their organs are still developing and they are exposed to higher dosages per unit of body weight, due to their smaller size; the indigenous community, due to the volatility of the chemical; and, finally, pregnant women exposed to pesticides and who are at increased risk of miscarriage, preterm labor, and birth defects (UNITED NATIONS HUMAN RIGHTS, 2017).

In addition, the studies that based the 2017 Report show that pesticides were found in umbilical cords and in the first feces of newborns, demonstrating exposure to pesticides already in the prenatal stage. It is worth mentioning that exposure to pesticides can be transferred by both parents, and the most critical period for exposure to the father is three months before conception, while maternal exposure is more dangerous from the month before conception until the end of the first trimester of pregnancy (UNITED NATIONS HUMAN RIGHTS, 2017).

Furthermore, there is no comprehensive regulation on a global scale to discipline pesticides, leaving a gap on the protection of human rights, without taking into account the substantial cost to governments and catastrophic impacts on the environment, human health and society as a whole. It is therefore detrimental to a range of human rights, placing agricultural

workers and agricultural communities, children and pregnant women and indigenous peoples, all classified as vulnerable groups, at high risk of abuse (UNITED NATIONS HUMAN RIGHTS, 2017).

Therefore, the 2017 UN Report seeks to demonstrate the harmful effects that pesticides pose to human health and the environment, since nature has been expelled from the environment and man has started to build his life without even protecting the limits inherent to the environment. It must be highlighted the situation of vulnerability of indigenous peoples and rural workers, who survive from the activity on the land.

4 METHODOLOGICAL CRITERIA FOR RESEARCH IN THE JURISPRUDENCE OF STF

Turning to an exposition of the jurisprudence of the Brazilian Supreme Court on pesticides, considering the bias of Socio-Environmental Law, it is important to note that the Supreme Court is the supreme body of the Judiciary, and it's main role is to guard the Constitution, as defined in article 102 of the Constitution of the Republic.

In summary, it can be stated that, among its main attributions, it belongs to STF the attribution to judge the Direct Action of Unconstitutionality of a federal or state normative act or law, the Declaratory Action of Constitutionality of a federal law or normative act, the Allegation of Disobedience of Fundamental Precept deriving from the Constitution itself and the Extradition requested by a foreign State (SUPREMO TRIBUNAL FEDERAL).

With the Constitutional Amendment 45/2004, STF approved, after repeated decisions on constitutional matters, precedents with binding effect in relation to the other organs of the Judiciary and to the direct and indirect public administration, at the federal, state and municipal levels (Article 103-A of the Constitution/1988).

Considering the above information, the empirical research was carried out in the electronic address of the STF, www.portal.stf.jus.br, especially in the item jurisprudence (in português: 'Jurisprudrência'), in the topic: research ('pesquisa'); Precedents ('súmulas') and binding effect precedents ('súmulas vinculantes'). In order to verify the STF's understanding on the subject, the following terms were used for the research: 'crop-chemistry' and 'pesticide'. It is noteworthy that the investigation of the STF trials was carried out between January 19th and 23th, 2019.

In the 'jurisprudence' item, in a research on the electronic website of the STF, using the expression 'crop-chemistry', 35 judgments were found; 05 Presidency decisions; and 04 Information. Finally, with the term 'pesticide', 04 judgments were found, 37 monocratic decisions and 01 Information. It is worth noting that the detailed analysis of these results will be reproduced

in the following item and that we selected only one judgment of the other analogous cases, whose

results follow the same direction.

In 'Precedents' item (SUPREMO TRIBUNAL FEDERAL. Súmula versão completa), search

using the words 'crop-chemistry' e 'pesticide' did not indicate any result. In the search for 'binding

effect precedents' (SUPREMO TRIBUNAL FEDERAL. Súmula versão completa) with both chosen

terms, the conclusion did not indicate any result of the existence of binding effect precedents on

this matter.

Thus, it will now be explained the results obtained, strictly on the jurisprudence

extracted from the electronic website of the STF, considering the quantitative result indicated in

the research, above mentioned, and taking into account the information presented on the

pesticide, the socio-environmental crisis and the Socio-Environmental Law, discussed in the

previous items.

5 NOTES ON THE EMPIRICAL RESEARCH ON STF'S JURISPRUDENCE

The Federal Constitution of 1988 came after the military dictatorship, and this

historical fact culminated in a Guarantor Constitution and aspirant to the protection of collective

and individual rights. Therefore, due to the right to access to justice, the number of lawsuits that

proceed in the Judiciary is significant, especially because the Judiciary inspires credibility to society

and because the hope of Justice lays on it.

On Mariana Almeida Passos de FREITAS's perception, there are difficulties faced by the

Judges in trials involving social and environmental lawsuits, which ends up relating Socio-

Environmental Law to a field of law not as effective as it could be. These difficulties are:

The main difficulties are: a large number of urgent immediate injunctions; matters of an eminently preventive purpose; decisions to be made based on

principles; the production of evidence (complex and expensive); the lack of knowledge of the matter by most judges; the often need to face economic power; the search for harmonization between environmental law and other fundamental rights; the attempt to solve the confrontation between the

fundamental rights; the attempt to solve the confrontation between the regulation of individual rights and the socio-environmental legal order, of a collective nature; the training of a large number of judges on solid principles

of private law (FREITAS).

According to Cláudia Maria BARBOSA (2008, P. 107-120), a responsible socio-

environmental Judiciary should consider "[...] conceptions of law and social and environmental

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goods and support a new paradigm of development capable of promoting not only strictly environmental sustainability but also social sustainability".

Article 225 of the Federal Constitution of 1988, inspired by the principles of the Stockholm Declaration and the Portuguese Constitution of 1976, enshrines the fundamental right of everyone to an ecologically balanced environment, imposing the co-responsibility of the Government and the community to protect it for present and future generations, based on intergenerational solidarity and equity (YOSHIDA, 2013, p. 02).

This fundamental right, as clearly stated in article 225, is consecrated to all, that is, not only to those who have risks of damages due to the environmental imbalance, including socio-environmentalism with protection of sociodiversity and biodiversity, without abstaining from the cultural protection of social groups.

5.1 Descriptive notes about the search result using the term "crop-chemistry"

Of the 05 Decisions of the Presidency located after using the term 'crop-chemistry', it is pointed out that only two of these decisions will be highlighted, since the results e object of the other 03 decision⁸ are related to those highlighted.

These are the two decisions that analyze the thematic of the crop-chemistry:

a) The President of STF at that time, Carmen Lúcia, judged Security Suspension No. 5230 MC-ED / RS, on 05/3/2018, whose objective was to reverse the injunction that allowed the commercialization of Paraquate Alta 200 SL, which had the administrative record rejected at the State Environmental Protection Foundation Henrique Luís Roessler, responsible for environmental licensing in the State of Rio Grande do Sul. Among the main arguments, it is pointed out that Anvisa decided, administratively, to ban Paraquate in a meeting held in 09/19/2017, considered its framework in the prohibition contained in Paragraph 6 of Article 3 of Law no. 7,802/1989.

It deserves particular emphasis the following passage from the Justice's decision on the matter, in particular because it considered the request for suspension aware of the complexity of the topic:

[...] It is important to note that the risks arising from the use of the product (mutagenicity and Parkinson's disease) are restricted to workers handling the

⁸ These are the three presidential decisions that were not mentioned: SS 5230 MC-ED, Reporter Justice President, Decision given by Justice CÁRMEN LÚCIA, judged in 06/20/2018; SS 2733, Reporter Justice President, Decision given by Justice NELSON JOBIM, judged in 07/01/2005; IF 89, Reporter Justice President, Decision given by Justice RAFAEL MAYER, judged in 08/21/1987.

product, in such way that the general population is not susceptible to exposure through food. There is no evidence that the use of Paraquate leaves residues in food. New scientific evidence that might exclude mutagenic potential in germ cells and biomonitoring studies that would ensure negligible exposure to the product could lead to a review of the Agency's decision on banning the product. However, in the absence of the availability of such data, until now, there is no legal support for maintaining the commercialization of the product in the country. The period stipulated until the complete ban of the product, of three years, could allow the presentation of this new evidence. It can also help to minimize the high economic, agronomic and environmental impacts of the measure, considering, mainly, the high efficiency of the product, its low cost, its characteristic of not causing resistance in weeds and its environmental advantages by allowing the adoption of the direct planting system. Despite the deadline for the banning of the product, immediate restrictive measures were taken to ensure the protection of workers. Only the application using closed cabin tractor will be allowed, seeking to minimize the exposure of users to the product. Its use in different cultures and in the mode as desiccant will be prohibited, besides several other measures were taken, such as actions of orientation and training to the users, changes in the labels and directions and the prohibition of commercializating packages with volume lower than 5 liters. With the implementation of all these measures, it is expected to minimize exposure to the product, guaranteeing the protection of users' health until the transition period established by the standard is finalized "(emphasis added), pages 65-66, e-doc. 1). The recognition by the federal agency of the harm in the use of paraguat to the health of those who manipulate herbicides with this substance in its composition demonstrates the similarity of the juridical question posed with that object of the actions of abstract control of constitutionality judged against state laws that banned the production, commercialization and use of asbestos, in which this Supreme Court established the constitutional legitimacy of the state legislative option to issue specific rules more restrictive than the national law, within its complementary, concurrent legislative competence (on trade, consumption and environment) and common (health care), and there is no impediment in adopting more cautious measures than that established by the national legislator (Direct Unconstitutionality Actions №. 3,937/SP, 3,406/RJ, 3,470/RJ, 3,356/PE and 3,357 / RS, and Allegation of Disobedience of Fundamental Precept №. 109 / SP). (SUPREMO TRIBUNAL FEDERAL. Decisões da Presidência).

In this case, in spite of not expressily addressing the bias of Socio-environmental Law, it is possible to notice the protection of the fundamental right of the vulnerable group (rural workers that apply Paraquate) by approving (determining) the suspension of the injunction and, as a consequence, the permanence of the rejection of the registration of this pesticide in the State, deviating any argument that us strictly financial (SUPREMO TRIBUNAL FEDERAL. Decisões da Presidência).

b) In the same sense of the decision above, the Justice President of the STF at the time, Joaquim Barbosa, on 08/08/2013, analysed, as a precautionary measure, Suspension of Injuction nº 683/RS, which aimed, in summary, reverse the injuction that suspended the rejection of the registration of pesticides Gramoxone 200, Gramocil and Mertin 400, before the State Foundation for Environmental Protection (Fepam) of the State of Rio Grande do Sul. Briefly, the decision, in a precautionary manner, decided for the maintenance of the rejection of the registration of these two pesticides in the State, in accordance with the precautionary principle, in such way that the injunction of the Court of Justice of Rio Grande do Sul (TJRS) was rescinded (SUPREMO TRIBUNAL FEDERAL. Decisões da Presidência).

It must be clarify that the decision examined by Justice Carmen Lúcia presents a more detailed analysis of the merit compared to the last decision cited, given that the reasoning explained the harmful effects arising from the use of Paraquat. There was a clear concern about the fundamental right to health and the dignified life of workers who work with crop-chemistry, especially as they are a highly toxic chemical, as also stated by the UN Report of 2017.

Despite not explaining the approach of Socio-Environmental Law in the highlighted decisions, it is possible to notice a legal progress in the analysis of the merit of the precautionary measure of the responsibility of Justice Carmen Lúcia and the attention focused on guaranteeing the right to health of rural workers.

Moving on now to the description of the 35 judgments⁹ found after the use of the expression crop-chemistry, it will be discuss the peculiarity of the cases and, in the same way as the

⁹ There are the judgments that are not mentioned in this item, considering that their object is equal to the judges selected and cited in this article: Rp 1243 MC, Rapporteur Justice NÉRI DA SILVEIRA, Tribunal Pleno, julgado em 13/03/1985; Rp 1241 MC, Rapporteur Justice CORDEIRO GUERRA, Tribunal Pleno, julgado em 13/03/1985; Rp 1249 MC, Rapporteur Justice DÉCIO MIRANDA, Tribunal Pleno, julgado em 13/03/1985; Rp 1247 MC, Rapporteur Justice FRANCISCO REZEK, Tribunal Pleno, julgado em 14/03/1985; Rp 1150, Rapporteur Justice ALDIR PASSARINHO, Rapporteur to judge Justice OSCAR CORRÊA, Tribunal Pleno, julgado em 16/05/1985; Rp 1246 ED, Rapporteur Justice RAFAEL MAYER, Tribunal Pleno, julgado em 29/10/1986; Rp 1246, Rapporteur Justice RAFAEL MAYER, Tribunal Pleno, julgado em 11/06/1986; Rp 1277, Rapporteur Justice FRANCISCO REZEK, Tribunal Pleno, julgado em 04/06/1986; Rp 1242, Rapporteur Justice OCTAVIO GALLOTTI, Tribunal Pleno, julgado em 08/05/1986; Rp 1248, Rapporteur Justice DJACI FALCAO, Tribunal Pleno, julgado em 19/03/1986; Rp 1247, Rapporteur Justice FRANCISCO REZEK, Tribunal Pleno, julgado em 12/12/1985; Rp 1153 ED, Rapporteur Justice OSCAR CORRÊA, Tribunal Pleno, julgado em 27/11/1985; Rp 1277 MC, Rapporteur Justice FRANCISCO REZEK, Tribunal Pleno, julgado em 28/08/1985; Rp 1257 MC, Rapporteur Justice CORDEIRO GUERRA, Tribunal Pleno, julgado em 29/05/1985; Rp 1153, Rapporteur Justice ALDIR PASSARINHO, Tribunal Pleno, julgado em 16/05/1985; HC 80219, Rapporteur Justice ILMAR GALVÃO, Primeira Turma, julgado em 08/08/2000; AI 158479 AgR, Rapporteur Justice MAURÍCIO CORRÊA, Segunda Turma, julgado em 13/02/1996; AI 155406 AgR, Rapporteur Justice ILMAR GALVÃO, PRIMEIRA TURMA, julgado em 20/09/1994; ADI 847 MC, Rapporteur Justice NÉRI DA SILVEIRA, Tribunal Pleno, julgado em 11/03/1993; Rp 1243, Rapporteur Justice NÉRI DA SILVEIRA, Tribunal Pleno, julgado em 29/09/1988; Rp 1442, Rapporteur Justice CARLOS MADEIRA, Tribunal Pleno, julgado em 11/05/1988; Rp 1348, Rapporteur Justice CELIO BORJA, Tribunal Pleno, julgado em 24/03/1988; Rp 1435, Rapporteur Justice CELIO BORJA, Tribunal

previous result, two cases will be highlighted among the others that present the same object and result of judgment.

a) The Direct Unconstitutionality Action nº ADI 3852/SC, whose rapporteus was Justice Dias Toffoli, judged on 10/07/2015 deals with the unconstitutionality of State Law (SC) nº. 13.922/07, since the norm imposes restrictions on the trade of imported agricultural products within the State of Santa Catarina. The Rapporteur's decision was based on the unconstitutionality of the state law, since the legislative competence belongs to the Union, and therefore, the state law that creates restrictions on the commercialization, storage and transit of imported agricultural products in the State is formally unconstitutional, even if it aims to protect the health of consumers against the possible misuse of pesticides by other countries (SUPREMO TRIBUNAL FEDERAL, ADI 3852/SC).

This judgment corroborates the argument that there is a need for an express provision in the Federal Agrochemical Law of 1989 so that pesticides banned in their country of origin are not registered in Brazil, considering the evidence of damage that was pointed out by the scientific community of the country of origin. source. It can be said that the initiative of the State of Santa Catarina, although very positive, transcends its legislative competence, and the Union is responsible for deliberating this specific aspect of the gap of the Federal Law of 1989.

a) The Complaint "Rcl 5847 / PR", judged by the Justice Rapporteur Cármen Lúcia, on 06/25/2014, decided that it is up to the State of Paraná to prevent, in its territory, the use of herbicide registered in the Ministry of Agriculture, in specific the use of 'glyphosate' in genetically modified soybean plantations (SUPREMO TRIBUNAL FEDERA, Rcl 5847/PR).

This judgment of 2014, highlighted above, corroborates the fact that the states of the federation have legislative competence to discipline the gaps of federal law, considering the provisions of article 24, items V, VI, XII, and article 23, items II and VI, both of the Federal Constitution.

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Pleno, julgado em 01/02/1988; Rp 1442 MC, Rapporteur Justice CARLOS MADEIRA, Tribunal Pleno, julgado em 13/08/1987; Rp 1249, Rapporteur Justice CARLOS MADEIRA, Tribunal Pleno, julgado em 22/04/1987; HC 137783, Rapporteur Justice MARCO AURÉLIO, Primeira Turma, julgado em 03/10/2017; ADI 4066, Rapporteur Justice ROSA WEBER, Tribunal Pleno, julgado em 24/08/2017; ADI 3813, Rapporteur Justice DIAS TOFFOLI, Tribunal Pleno, julgado em 12/02/2015; RcI 5847, Rapporteur Justice CÁRMEN LÚCIA, Segunda Turma, julgado em 25/06/2014; HC 119645, Rapporteur Justice LUIZ FUX, Primeira Turma, julgado em 18/02/2014; RE 559622 AgR, Rapporteur Justice GILMAR MENDES, Segunda Turma, julgado em 06/08/2013; RE 286789, Rapporteur Justice ELLEN GRACIE, Segunda Turma, julgado em 08/03/2005; RE 107924 AgR, Rapporteur Justice SEPÚLVEDA PERTENCE, Primeira Turma, julgado em 21/09/2004. Available at: . Access in jan 23rd, 2019.

Moving on now to the analysis of the 04 Information pointed out in the research of jurisprudence, with the expression "crop-chemistry", it is pointed out that Informantion nº 752 deals with a Complaint and legislative competence; Paragraph 774 deals with the exclusive legislative competence of the Union; the number 782 deals with labor matters and mentions the word crop-chemistry; and, finally, the other item belonging to Information nº 782 talks about the advertising of alcoholic beverages and legislative omission, including the advertising of crop-chemistry (SUPREMO TRIBUNAL FEDERAL. Informativos).

5.2 Descriptive notes about the search result using the term 'pesticides'

The only Information found as result of the research with the expression 'pesticide' is registered under Nº. 776 and provides, in summary, about environmental legislation, in particular the immediate prohibition or gradual elimination of the burning of sugarcane to its harvest, and Paulínia's municipal competence to legislate the matter:

[...] It was discussed the competence of the municipality to legislate on the environment and to publish law with content different from that disposed in state legislation. The Court, in the first instance, overcame the preliminary questions raised regarding the alleged impossibility of analysing the appeal. On the merits, the Plenary pointed out that the issue in question, due to its eclectic and multidisciplinary nature, would involve social, economic and political issues - the possibility of social crisis, unemployment, environmental contamination due to the use of machines, impossibility of mechanization in certain lands and the existence of a federal proposal to gradually reduce the use of burning - according to information gathered at a public hearing held on the subject. When judging the constitutionality of the municipal law in question, from a socioeconomic point of view, it would therefore be necessary to consider whether the positive impact of the immediate prohibition of sugarcane burning on productivity would be constitutionally more relevant than the social pact in which the Brazilian State had committed himself to conferring to his people full employment for the full enjoyment of their dignity. Therefore, in this case, the STF, faced with a set composed by certain and predictable mass unemployment, together with the mere possibility of increasing productivity, should invest in the role of guardian of the Constitution, in defense of the interest of the minority represented by the class of sugarcane workers, who deserve protection before the so-called technological progress and the respective mechanization, both brought by the pretension of immediate prohibition of the harvest of the cane through the use of fire (SUPREMO TRIBUNAL FEDERAL, Íntegra do Informativo nº 776).

It is understood that the discussion of the matter (prohibition of the burning of sugarcane for harvest) revolved around the socioeconomic aspects, that is, the number of

unemployed, the economic losses due to the substitution of the workers by the machinery, the increase productivity with mechanization of the crop, and, finally, the environmental pollution caused by the burning (SUPREMO TRIBUNAL FEDERAL, Pesquisa de Jurisprudência).

In addition, Information nº 776, on merit, discusses the environmental legislative competence expressed in the Federal Constitution of 1988. Therefore, in spite of addressing a topic with relevant social and environmental aspects, such as the health of the group (workers) and the emission of greenhouse gases and air pollution, there is no approach to the fundamentals of Socioenvironmental Law (SUPREMO TRIBUNAL FEDERAL. Pesquisa de Jurisprudência).

On the 04 judgments found in the research with the expression 'pesticides', which are: Rp 1243/PE judged on 09/29/1988; Rp 1248/SC judged on: 03/19/1986; Rp 1249 MC/AL judged on 03/13/1985 and Rp 1243 MC/PC judged on 03/13/1985; it is possible to conclude that there is only a claim for the constitutionality of laws that regulate the use of crop-chemistry and pesticides. Another peculiar point that deserves to be highlighted is the fact that the term pesticide in these judgments is applied as synonyms of pesticide, and were judged before the Federal Agrotoxic Act of 1989 (SUPREMO TRIBUNAL FEDERAL. Pesquisa de Jurisprudência).

Finally, the study of the monocratic decisions result of the research using the term 'pesticides' is carried out. It should be emphasized that it was decided not to analyse all 35 monocratic decisions¹⁰, highlighting only two cases, considering that they are analogous to the object of the remaining 35 decisions:

¹⁰ The following are the monocratic decisions that were not mentioned in the article but they were the result of research: ARE 1141945, Relator(a): Min. MARCO AURÉLIO, julgado em 04/09/2018; ARE 1153172, Relator(a): Min. EDSON FACHIN, julgado em 04/09/2018; ARE 1153928, Relator(a): Min. RICARDO LEWANDOWSKI, julgado em 21/08/2018; ARE 1150585, Relator(a): Min. RICARDO LEWANDOWSKI, julgado em 08/08/2018; Rcl 31026, Relator(a): Min. EDSON FACHIN, julgado em 05/07/2018; ARE 1136632, Relator(a): Min. LUIZ FUX, julgado em 21/06/2018; ARE 1140075, Relator(a): Min. DIAS TOFFOLI, julgado em 20/06/2018; ARE 1131692, Relator(a): Min. DIAS TOFFOLI, julgado em 21/05/2018; ARE 1132829, Relator(a): Min. LUIZ FUX, julgado em 21/05/2018; ARE 1099226, Relator(a): Min. EDSON FACHIN, julgado em 18/12/2017; ARE 1088290, Relator(a): Min. RICARDO LEWANDOWSKI, julgado em 14/11/2017; ARE 1087497, Relator(a): Min. LUIZ FUX, julgado em 31/10/2017; ARE 1087389, Relator(a): Min. LUIZ FUX, julgado em 30/10/2017; Rcl 28502, Relator(a): Min. RICARDO LEWANDOWSKI, julgado em 24/10/2017; ARE 1079306, Relator(a): Min. MARCO AURÉLIO, julgado em 16/10/2017; ARE 1080341, Relator(a): Min. RICARDO LEWANDOWSKI, julgado em 10/10/2017; ARE 1080343, Relator(a): Min. CELSO DE MELLO, julgado em 05/10/2017; ARE 1069377, Relator(a): Min. DIAS TOFFOLI, julgado em 13/09/2017; ARE 1070995, Relator(a): Min. LUIZ FUX, julgado em 31/08/2017; ARE 1069704, Relator(a): Min. DIAS TOFFOLI, julgado em 29/08/2017; ARE 1059257, Relator(a): Min. DIAS TOFFOLI, julgado em 16/08/2017; ARE 1056833, Relator(a): Min. LUIZ FUX, julgado em 30/06/2017; ARE 1013378, Relator(a): Min. ALEXANDRE DE MORAES, julgado em 30/05/2017; ARE 981741, Relator(a): Min. ALEXANDRE DE MORAES, julgado em 16/05/2017; ARE 1037647, Relator(a): Min. CELSO DE MELLO, julgado em 07/04/2017; ARE 1032266, Relator(a): Min. RICARDO LEWANDOWSKI, julgado em 23/03/2017; ARE 1017473, Relator(a): Min. RICARDO LEWANDOWSKI, julgado em 01/02/2017; ARE 1019152, Relator(a): Min. CELSO DE MELLO, julgado em 15/01/2017; ARE 999571, Relator(a): Min. MARCO AURÉLIO, julgado em 05/10/2016; ARE 998930, Relator(a): Min. MARCO AURÉLIO,

julgado em 30/09/2016; ARE 994012, Relator(a): Min. CELSO DE MELLO, julgado em 13/09/2016; ARE 988099, Relator(a): Min. EDSON FACHIN, julgado em 31/08/2016; ARE 976425, Relator(a): Min. DIAS TOFFOLI, julgado em 16/06/2016; ARE 914273, Relator(a): Min. LUIZ FUX, julgado em 28/04/2016; ACO 1674, Relator(a): Min. CELSO DE MELLO, julgado em 08/10/2014; ACO 1674 tutela antecipada, Relator(a): Min. CELSO DE MELLO, julgado em 19/11/2010; Available at: http://stf.jus.br/portal/jurisprudencia/listarJurisprudencia.asp?s1=%28%28PESTICIDA%29%29+NAO+S%2E PRES%2E&pagina=4&base=baseMonocraticas&url=http://tinyurl.com/y8nudxsr>. Accessed on: jan, 22nd, 2019.

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c) On 10/10/2018 was judged the ARE 1166836/RJ, Rapporteur Justice Alexandre de Moraes, evolving the notorious case of 1987, considering that the contamination by pesticide in the city of Duque de Caxias, state of Rio de Janeiro, whose area would have also contaminated the resident population. The cause of the contamination of the inhabitants comes from the abandonment of the pesticide factory of the National Malaria Service of the National Department of Health, in the region named 'City of the Boys', since the toxic material classified as HCH (hexachlorocyclohexane), popularly known as 'drill powder', was not taken from inside the factory and has then spread and seeped into the soil.

However, the merits of this judgment, in essence, analyze the lack of competencof the Union for the issue, since the evidence has not proved the residency of the possible victims at the

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site of the environmental disaster, not beeing proved the need for medical treatment for the health problems arising from the contamination by this pesticide (SUPREMO TRIBUNAL FEDERAL. Decisões monocráticas).

d) In the judgment held on 08/24/2018, ARE nº 1153928/DF, rapporteur Justice Edson Fachin, it was pointed out, in summary, that the understanding of the Court's jurisprudence has received indemnities for moral damages, in the amount of R\$ 3,000.00 per year of exposure to health workers who have had DDT blood contamination due to unprotected pesticide exposure during work activities, regardless of the development of pathologies associated with the product.

The duty to indemnify comes from the fact that the Brazilian State allowed the use of the pesticide DDT by health agents when they carried out field work in the fight against dengue fever, malaria, yellow fever and other endemic diseases in the Amazon Region (1980s and 1990s), without having used the necessary diligence in the provision of PPE - Personal Protective Equipment - suitable for the handling of highly toxic products (SUPREMO TRIBUNAL FEDERAL. Decisões monocráticas).

6 FINAL CONSIDERATIONS

Given the above, it can be verified that Socio-Environmental Law seeks to integrate the human being with nature in order to be part of a whole, in a relationship of interdependence. In short, this integration aims to combat the existing environmental crisis and enable nature to be seen as an integral part of human life, and, therefore, indispensable.

The judicialization of social and environmental issues is brought to the Judiciary because the Judiciary is seen as an agent of change and capable to guarantee the fundamental rights in search of a dignified life. It was verified, through empirical research, that the STF, the Highest Court of the Brazilian Judiciary, does not judge the merits of lawsuits involving pesticides under the Social-Environmental Law. In other words, it has not been verified until now the construction of a consolidated understanding of the STF on the subject of pesticides in the light of Socio-Environmental Law.

In this sense, according to the words of Claudia BARBOSA and José Quirino Tavares NETO (2017), the Judiciary "[...] shows itself to be resistance to significant changes and, more serious, not prepared to face the new demands and categories of new rights, which are typical of contemporary society", as in the case of the issues raised by Socio-Environmental Law.

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As demonstrated in the decisions collected, the STF has significant power in its hands,

and may even invalidate administrative acts and declare laws unconstitutional, as well as promote

and foster the development of Socio-Environmental Law in the field of pesticide.

Finally, it is possible to notice that the academic specialization of magistrates is an

effective tool to begin the construction of an awareness of judges and the Judiciary as a whole

about the reach of Socio-environmental Law, considering the territorial extension of Brazil and the

significant cultural and regional diversity of its society, especially with regard to the necessary

protection of vulnerable groups. These peculiarities of the Brazilian context reaffirm the importance

of the insertion of knowledge of Socio-Environmental Law as a tool to analyze the lawsuits that are

taken to the Brazilian Judiciary.

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