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Article

Environmental injustice in journalism: Analysis of pesticide pollution reporting

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Abstract: The objective of this paper is to discuss the approach of journalism to the use of pesticides as a situation that generates environmental injustice. To make such a reflection, we rely on the series of Zero Hora reports published in December 2016 on the contamination of Ceasa products, in Porto Alegre, by pesticides banned in Rio Grande do Sul (Brazil) or used above the limit set by law. We start from Acselrad's conception of environmental justice. This is a notion that refers to socio-political dynamics since it includes conflicts arising from the violation of the rights of human communities due to unsustainable use of the environment. To assess the impact of injustices in the media, we resorted to the assumptions of Environmental Journalism, a perspective that defends the mobilizing function of journalism based on a complex view of the phenomena (Girardi et al.) from a descriptive and qualitative analysis (Martins). Among the results, it is noted that the series does not incorporate a systemic view of the problem, ignoring the impacts of pesticides on the entire production chain and ecosystems.

Keywords: environmental journalism; environmental justice; pesticides; zero hora; news coverage; pesticides

1. Introduction

In December 2016, the RBS Research Group[1] published in the Brazilian newspaper Zero Hora (ZH), the main printed title of the communication group, a series of reports on the sale of fruit and vegetable crops contaminated with alarming levels of pesticides at the State Supply Company (Ceasa), in Porto Alegre, capital of the state of Rio Grande do Sul (RS), entitled Perigo no Prato (Danger in Prato). A laboratory analysis commissioned by the RBS Group also found out the presence of substances unsuitable for the cultures in which they were used and even banned in RS and Brazil. A serious violation of rights, therefore, since Ceasa is the main food distributor of the state.

It is from this material that we seek to debate the journalistic coverage on the use of pesticides, raising aspects related to environmental journalism and environmental in justice. The environmental justice approach aims to analyze what are the contributions brought by the series of ZH reports on pesticides due to the systemic nature of the risks involved in their use in food production. We know that there may be contamination of consumers, but the exposure of workers who apply poisons in plantations is even more dangerous [1]. Of equal concern are the problems that these substances bring to ecosystems.

Intrinsic to the concept of environmental justice is the criticism of developmentalism and ecological modernization[2], since the authors postulate that

environmental inequality feeds capitalism. According to Acselrad [2], the introduction of this theoretical premise in Brazil occurs in the 1990s, when the "distributive inequality" of environmental conflicts is evidenced in the face of large neoliberal enterprises and the consequent regulatory flexibilization so that large corporations can freely access the natural resources of explored territories.

In this sense, the perspective of environmental journalism becomes necessary to confront this hegemonic position. It presupposes, according to Girardi [3], a plurality of voices and worldviews—in order to embrace the complexity and interconnections between knowledge. Environmental Journalism refutes the neutrality historically attributed to journalism, because it assumes the defense of the planet and fights for the existence—or survival, in more extreme cases of its communities. We start from this view to discuss the material published in ZH.

Thus, in this text we discuss the use of pesticides, the idea of environmental justice and the role of journalism committed to the environment, and then present a descriptive analysis [4], with a qualitative perspective [5], which was carried out in the series of reports mentioned above. Finally, final considerations are made based on the results obtained.

2. Contextualization of the use of pesticides

In 2008, Brazil became the world's largest consumer of pesticides. According to research reported by the National Health Surveillance Agency (Anvisa) and by the Observatory of the Agrotoxics Industry of the Federal University of Paraná presented in 2012, "while in the last ten[17] years the global market for pesticides grew 93%, the Brazilian market grew 190%" [6].

As a result, there has been an increase in environmental pollution and in the emergence of diseases proven by studies that relate illnesses, such as cancer, for example, to exposure to these chemicals. To understand how we arrived at this path, it is important to remember the facts that led the country to opt for the so-called modernization of agriculture, which requires the adoption of agricultural technologies related to what Lutzenberger [7] calls the "NPK + poison" paradigm[3].

After World War II, the world was divided into two parts. One, reconstructed by the Marshall Plan (Europe and Japan), had great investment in industrialization. The other (Latin America, Asia and Africa) was destined to food production. It is important to emphasize that this industry recovered by the Marshall Plan was largely the war industry which, in this new moment, became obsolete, and then went on to produce inputs and machinery for agriculture in this third world.

Thus, Brazil undertook the modernization of agriculture to solve the problem of food production and, later on, to avoid possible agricultural conflicts. The option for conservative modernization was justified so that the process would result in the transformation of the technical base of production, without major changes in the farm structure [8]. Thus, the country, instead of opting for agrarian reform to increase food production, became associated with this world movement under the leadership of the United States, which became its policy, exerting hegemony in all Brazilian economic decisions. As a result, it became an importer of agricultural inputs and machinery to produce especially those foods of interest to the so-called

first world, becoming totally dependent on the agrochemical industry conglomerates. This process, called the Green Revolution, was a program whose explicit objective was to contribute to the increase of agricultural production and productivity in the world, through the development of experiments in the field of plant genetics for the breeding and multiplication of seeds suitable for the conditions of different soils and climates and resistant to diseases and pests, as well as the discovery and application of more modern and efficient agricultural techniques or cultural treatments [9].

For Pinheiro [10], the Green Revolution was a counter-operation implemented to destroy what was left of the more balanced agriculture at the end of the 1960s. It was one of the most successful strategies of the agricultural modernization process that increased agricultural production at great social and economic costs. After so many years, the impacts on public health are broad, affect vast territories and involve different population groups, such as workers in various branches of activity, inhabitants of the surroundings of factories and factories, as well as all of us, who consume contaminated food. These impacts are associated with our current development model, focused primarily on the production of primary goods for export [11].

According to the dossier presented by the Brazilian Association of Collective Health (ABRASCO) in 2015, 71 million hectares of temporary (soybean, cane, cotton, millet) and permanent (coffee, citrus, fruit, eucalyptus) plantations were planted in Brazil in the 2011 harvest. This corresponds to approximately 853 million liters of agrochemicals sprayed on these farms, especially herbicides, fungicides and insecticides, which represents an average of 12 liters per hectare and "[...] average environmental/occupational/food exposure of 4.5 liters of agrochemicals per inhabitant" [6] (p. 52). The study also notes that "[...] the highest concentrations of pesticide use coincide with the regions with the highest intensity of soybean, millet, cane, citrus, cotton and rice monocultures", and RS is the fourth largest consumer of agro-toxins, representing 10.8% of the total [6] (p. 55). However, according to the dossier, vegetable crops receive 8 to 16 times more pesticides per hectare than soybean crops.

Thus, one third of the food that reaches the Brazilian table is contaminated with pesticides. Some active ingredients are classified as mildly or slightly toxic. However, the use for months, years and even decades can lead to chronic effects, manifesting in several diseases such as cancers, congenital malformations, endocrine, neurological and mental disorders [6]. In addition to affecting human health, the use of such products contaminates water, soil, air and ecosystems. The ABRASCO dossier also highlights that the law that regulates the use of pesticides does not contemplate risks in the application and consumption, and there is no stimulus for research on the interactions of pesticides.

The gravity of the situation is intensified with the "[...] global blackmail that imposes its use" [6] (p. 80). The old ghost of hunger in the world is used to remind us that it is urgent to feed undernourished Africans, Asians and Latin Americans. However, it hides the fact that food is to fatten the European and American population, while "[...] the environmental and social inequalities suffered are paid by these peoples, without their human rights problems of access to land, among others, being solved" [6] (p. 80).

But how to identify the diseases if health services and professionals are not properly trained to make such diagnoses? In truth, the damages are hidden by a network of interests that permeates agricultural research, ruralists, industry and its branches in the government and the National Congress. We witness, then, the efforts to make the pesticides law more flexible and the speeches of the representatives of the people trying to convince the citizens that pesticides are important to be able to produce cheaper food for the poor of Brazil.

In 2013, for example, Senator Kátia Abreu (PMDB) demanded from the president of Anvisa, Dirceu Bar-bano, the release of the also called agricultural defensives, since the lack of these would make the market more expensive and damage production (CAN [12]). Already in 2015, the federal deputy Luis Antônio Covatti (PP) presented the draft law of the Chamber of Deputies No. 3200/2015, which instituted the National Policy on Phytosanitary Defensives and Environmental Control Products, which, among its proposals, aims to change the nomenclature of "pesticides" to "phytosanitary defensive products" [13]. Such manifestations are part of an attempt to decharacterize the periculosity of pesticides through the construction of discourses that open up the true meaning of poison, which is a product that arose to kill.

The strategy of justifying the need for agrochemicals is exercised through the imposition of technocratic rationality on public opinion. This artifice is based on the implicit idea that any technique aimed at solving the world's food challenge is morally justifiable and, therefore, should be applied. Using mechanistic arguments that have never been demonstrated, the technocratic imperative considers as objectively necessary what is economically and ideologically opportune. By legitimizing the dominant system through mystifications and theories of unproven veracity, technocracy exerts a power analogous to that exercised by the Church in the Middle Ages, in this case consecrating the negative effects of pesticides as an inevitable social necessity [14].

The contradictions of the agricultural model drive the emergence of several campaigns, social movements and films denouncing the use of pesticides, soluble fertilizers and GMOs, which end up demanding more pesticides. The Permanent Campaign against Pesticides and for Life was launched in 2011 with the objective of sensitizing Brazilians to the risks that pesticides represent and to take measures to end their use in the country. Social movements, such as the Movimento dos Trabalhadores Rurais Sem Terra (MST), and research institutions, such as the Universidade Federal da Fronteira Sul (Federal University of the Southern Border), are part of the campaign.

The feature films O veneno está na mesa I and II, by filmmaker Silvio Tendler, released respectively in 2011 and 2014, are examples of productions that denounce the problems and social injustices resulting from this context. Such injustices also had visibility with the samba-enredo Xingu, o cla-mor que vem da floresta, from the Impera-triz Leopoldinense samba school, from Rio de Janeiro (RJ), at the 2017 carnival. The repercussion was great and generated protests from rural farmers and their representatives in the Brazilian Congress. The economic interests involving pesticides and GMOs are so gigantic and complex that the Globo Network itself began to broadcast a campaign entitled Agro é Pop, which has several sponsors

linked to agribusiness, in prime time since 2016.

If, on the one hand, there are still the mechanisms to guarantee the ever-increasing consumption of pesticides, there is a movement that emerged in the 1970s to show just the opposite: it is possible to produce without the use of the aforementioned modern technologies. Organic agriculture[20]—which also has a variety of other names—began in Europe and has been spreading throughout the world. In the 1990s, the perspective of agroecology arose, which includes in the movement, in addition to the ecological view, the economic and social aspects [15].

In 2015 there were 11,084 producers registered in the National Register of Organic Producers, managed by the Ministry of Agriculture, Livestock and Supply (MAPA). The leadership is with Rio Grande do Sul (1554), followed by São Paulo (1438), Paraná (1414) and Santa Catarina (999), according to information from Portal [16], which also indicates that the area of organic farming in the country is already 950 thousand hectares. This is good news, because if on the one hand the use of pesticides generates environmental injustice, agro-ecology grows, despite the political and economic crisis, highlighting how the path of environmental justice can be built.

3. Environmental injustice

The concept of environmental justice articulates the process of vulnerabilization of health, quality of life and access to natural resources of communities directly impacted by enterprises that cause pollution of water, air or soil. This perspective refutes the argument of the hegemonic utilitarian reason that pollution is democratic because the environment is unique [2] and affirms that the unequal distribution of environmental risks has a greater impact on traditional populations and specific ethnic groups—such as blacks, indigenous peoples and ribeirin-hos—whose territories are the target of large development projects [17]. In this article, we are interested in observing the application of this concept to the reference, in the corpus, to farm workers, who are in direct contact with pesticides.

Given this context of threats, the importance of "repoliticizing" environmental issues [2] arises, considering the socio-cultural components of the environment and incorporating the struggle for social justice. In this way, it seeks to combat the subaltern role and the historical silencing attributed to communities affected by inequalities. For Acselrad [2], environmental justice is linked to the perception of environmental conflicts. In other words, this perspective considers the disputes between different visions of the environment that arise in the decision-making spheres. These disputes are frequently overcome by groups aligned with the interests of international capital.

In the case of pesticides, the use data presented above show the risk of contamination in regions where there is large-scale production. In Brazil, the social and environmental costs of this activity are enormous, since the country is a domestic consumer and exporter of items produced with the application of pesticides. In 2015, a publication of the National Cancer Institute (INCA) warned about the risk of cancer involved in the consumption of pesticides in Brazil, with the aim of: ᵡ [...] strengthening initiatives for the regulation and control of these

substances, as well as encouraging agroecological alternatives here proposed as a solution to the dominant agricultural model" [1].

Based on Acselrad [2], we can see that the emergence of the struggle for environmental justice is happening in and for the present, contrary to the concern hitherto in force with an intergenerational conflict, in which hypothetical scenarios of scarcity, devastation or annihilation of the natural environment are apparently distant. Therefore, when we observe the urgency of the claims for environmental justice in the face of alarming data on the use of pesticides in Rio Grande do Sul, we expect from journalism an approach committed to the right of communities to democratic access to common goods.

4. O olhar do jornalismo Ambiental

When dealing with journalistic coverage on the environment, the Research Group on Environmental Journalism (CNPq/UFRGS)4, based on different analyses of the journalistic treatment given to the subject over the last 10 years, has adopted the differentiation of a practice committed to the sustainability of the planet from another that seeks to be neutral, treating environmental issues in a more bureaucratic way. The first way of working on environmental guidelines is associated with the concept of Environmental Journalism, which is our starting point to dive into the reports that deal with the contamination of fruit and vegetable farms by pesticides. The other perspective is described as Environmental Journalism and does not bring in its approach a broad and complex vision of the issues, concerned in a balanced way with the scientific, social, environmental, economic, political, cultural and ethical aspects of each problem[5].

How should journalism approach this issue that affects everyone's life? Assuming the fight for environmental justice is a good start for the professional practice to be processed in a non-inclusive way, seeking to involve people and other beings involved with their stories, which record the injustices and disrespect to human rights and other beings of nature. This is one of the characteristics of the Environmental Journalism. As a form of knowledge, this understanding respects the preconceptions of journalism and goes beyond, accepting the challenge of incorporating the systemic vision to show the interconnection of the elements that involve an environmental coverage. In this sense, this approach to journalism must also to recognize the complexity of environmental events, which cannot be reduced to simple formats; to contemplate the diversity of knowledge and not to remain refusing official sources (which are not the only ones, despite their importance); to defend biodiversity and life in its fullness, which means to stop being impartial; and to assume its educational, citizen and transforming role [18] (p.377).

One of the main questions of this way of doing journalism is directed towards environmental knowledge, "[...] Which is not confused or is not the privilege of specialized institutions and which, in truth, is the result of the articulation of multiple knowledge, with strong and beneficial influence of traditional knowledge, experiences and knowledge" [19]. Environmental Journalism is not the property of those who have the monopoly of the word, because it must be connected with pluralism and diversity of sources.

The proposal of this journalism aims to awaken the re-flection and, therefore, the action of the citizens for environmental issues, by means of well contextualized information. Bueno [20] emphasizes that "[...] environmental communicators or journalists must be aware that this is an activity that requires militancy, commitment, training, ethics and professionalism".

Environmental Journalism encompasses a critical attitude in defense of the sustainability of life, aligned with the proposal of environmental justice. Bacchetta [21] highlights this role: "It is a journalism that seeks to develop the capacity of people to participate and decide on their way of life on Earth, to definitively assume their planetary citizenship". It is connected with citizenship, so it seeks to involve the population with environmental issues, developing their ability to participate and decide on issues that involve their existence. This means that the practice of this journalism should involve others and let them speak in order to understand the reality and build narratives committed to the search for environmental justice.

5. Analysis

In order to undertake this analysis, we adopted a qualitative approach, which seeks to interpret the data in depth, allowing a better understanding of the object of the research [22]. In relation to the technical procedures, we used documentary research, since our object of analysis is the series Perigo no Prato, composed of five reports, viewed in ZH from December 5 to 9, 2016 (from second to sixth-February). The analyzed material has restricted access to[6].

Due to the defined objective, we associate this type of research with descriptive analysis [4]. According to Gil [5], the main objective of this type of research is to describe the characteristics of a given phenomenon. Thus, we systematically observe the corpus and analyze it from descriptive records, taking as a parameter the criteria of environmental journalism, in light of the contributions of environmental justice.

The first report, entitled Invisible Evil, introduces the problem and shows the chain of irresponsibilities, from the producer of fruit and vegetable crops to the seller, who puts food with chemical products on the table of the gauchos, according to information from the newspaper. The second report is called Sua Saúde sob Risco (Your Health at Risk) and presents information on how agrochemicals affect the health of consumers. The third report addresses the smuggling of pesticides in the State. On the fifth day, the report focuses on the agreement made in the state of Pernambuco, as an inspiration for the RS. The last report closes the investigation and informs which measures are being taken by the actors involved in the denunciation.

The investigative series of ZH under study is based on the legislation and judicial agreements regarding pesticides in RS, and focuses, above all, on the failure to comply with these commitments and on the lack of supervision by the authorities. The report makes use of the Law of Access to Information to obtain test results from the Central State Laboratory (Lacen), which, according to the Term of Contract Adjustment (TAC) signed in 2012 between the Public Ministry and Ceasa, should perform up to 20 analyses monthly on products offered for sale.

The set of reports presents infographics to show the number of pesticides in each sample examined. It also uses a series of photos to explain the analysis process

in the laboratory. Other graphic resources present are illustrations, maps - which show the pesticide breakage—and boxes to highlight the main numbers, phrases and answers of the authorities.

Through the analysis entrusted to the Federal University of Santa Maria, the report identifies, initially, four worrying situations regarding agro-toxins in the state: registrations above the limit allowed by Anvisa; prohibited for food under analysis; with prohibited use in Brazil; and without registration in the country.

In the texts there is a recurrent use of the term "agrochemicals", which represents a more critical view of the journalism in relation to the 1980s, for example, when this word was almost forbidden in the reports (Grupo de Investigação RBS [23])[7]. However, in some articles, the words "defensives" and "agrochemicals" are used synonymously, which shows the absence of the Environmental Journalism view: now, if the use of a poisonous product is a violation to the environment and to life, a denomination that embraces this responsibility ends up not being able to dis-create the complexity of the harm caused by its application and consumption.

The voices heard in the construction of the report are concentrated in official sources (government representatives and judicial bodies), specialists (university professors and technical professionals) and the private sector (company representatives) (RBS Research Group, [24])[8]. Many people contribute to the discussion driven by the research, but they are restricted to these categories. We highlight that no farmers or rural producers were heard, as well as representatives of the ecological movement or environmental organizations. All these people present, in their specificities, a direct link with pesticides, either because they use them or because they have historically fought them. Still, they are exposed only contamination data from the use and consumption of agrotoxins occurring abroad (Grupo de Investigação RBS, [25])[9]. We believe that it would be more relevant to address regional data, since the context under discussion is Brazil and, specifically, RS.

As defined by Gelós, "environmental journalism consists of a broader spectrum of sources and visions, ranging from traditional knowledge to knowledge generated by science and technology" [26]. We understand, in this analysis, that the diversity of sources does not guarantee the diversity of voices. From the perspective of Environmental Journalism, the reportage should have presented other views and knowledge, which had been silenced, about the reality of the consumption of pesticides by the Gaucho citizen. We observe that the series of reports did not consider the possibility of presenting other ways (techniques) of producing food, that is, it did not address ecological agriculture, which does not use pesticides and fertilizers in its culture.

The journalists did not present a global vision on the environmental, social and public health problem caused by the use of pesticides in food production, even the team affirming to have gone after "alternatives to reduce the danger of pesticides in farms" (Grupo de Investigação RBS, 5 dez-embro: 6 [27])[10]. In the gaps in the interviews, we detected only one source that presented a critical view on pesticides and other farming possibilities. It should be noted that the space occupied by this information is a small paragraph at the bottom of the page, located on the right side. We identified the following warning in the statement of Victor[23] Pelaez, professor at

the Federal University of Paraná: The "risk of hunger" is still very present in the discourse justifying the predominant use of pesticides. The consolidation of a less harmful alternative to health - be it organic production or biological pest control - will depend on long-term investments and public policies[11]. (grifo nosso) [28].

Following the movement of analysis, we find in different moments of the narrative of the reports an intention to justify all the irregularities identified by the research group on pesticides from the point of view of the lack of control by the government of Rio Grande do Sul, mainly in the last report (Grupo de Investigação RBS, December 9). One of the sections that allows us to illustrate this position is in the editorial of the edition that published the last report of the series, entitled Insegurança Alimentar (Food Insecurity). In it the newspaper affirms that the purpose of the reporters' investigation - "to alert to the risks and the fragility of the public services' actions"[12]—was fulfilled. In the five reports, the journalists tend to blame the state government for the current context in which the food supplied by Ceasa is found - for not implementing the TAC, for not having an adequate structure to carry out the analyses and for not complying with the legislation.

In response to this described scenario, the journalists of the RBS Research Group (2016, December 8: 24) [29] present in the fourth report how the TAC managed to establish actions to combat the irregular use of pesticides in the state of Pernambuco, Brazil. They continue to make the same criticisms of the state of Rio Grande do Sul and try to demonstrate how the case of Pernambuco should serve as an example. However, we need to note that Ceasa pernambucana has outsourced its analysis and charges buyers to be able to do so. We understand that this comparison made by the report does not agree with the reality of each state and situation. In Rio Grande do Sul the objective is to continue with Lacen and not to encourage the dismantling of public institutions.

However, we note that the series of reports does not make this same charge with the private sector. The companies that manufacture and sell these products also have responsibilities over the agricultural producer that uses the pesticide placed on the market. Thus, we emphasize that, yes, the state should be charged for its action in this fis-cation and control, but the industry should also be involved in this discussion. In the first report, the safety and product director of Bayer in Latin America, a company that manufactures pesticides, seeds, fertilizers and remedies for humans and animals, was heard by the journalists:

Pests will always exist everywhere. What happens is that they develop greater resistance and emerge in abundance due to the tropical climate. The question is not to finish with the defensive, but to continue developing new ones because the resistances are there. O ponto é fazer o uso responsável e correto[13] [30].

This polarization of the problems for the public sector is evidence of the lack of a systemic vision in the coverage, as it does not bring up for debate other essential issues to rethink the production of these fruit farms. From the perspective of environmental journalism, reportage also needs to recognize that the complexity of environmental events cannot be reduced to simplistic formats [18]. Moreover, it is possible to observe that the journalists conducted the series with an "[...] alarmist approach, with little disclosure of concrete scientific data and high doses of opportunism when the coverage touches on actions to combat the problem",

according to the description of Girardi and Schwaab [29] for a little in-depth reportage. Thus, due to the lack of problematization of the consequences of environmental damage for the population in direct contact with toxic substances, the principle of environmental justice as stated by Acselrad [2] and Herculano [17] is not present in the series of reports.

Also prioritized was the claim that food should be within the standards established by Anvisa, but, at the same time, one of the reports was dedicated to the danger that human beings suffer from eating products that have been exposed to pesticides (RBS Research Group, December 6). Thus, the journalists did not present other production models and crop alternatives, perpetuating the worn-out logic that it is necessary to use poisons to produce food. Primavesi [30] contributes to this discussion by pointing out that:

Modern agriculture has become a tool for earning money with managed products, which can even be used as food, eventually, but with the total responsibility of the consumer's risk. The health of the consumer is just a detail not so important for those who develop these products with the sole objective of making money [30].

Because of this statement, we were able to elucidate the data presented in the second report (Grupo de In-vestigação RBS, 2016, December 6). In addressing the problems that affect the health of citizens, the journalists make explicit economic information about the country's agricultural model - as if it were a justification for the use of pesticides: Brazil is the world's largest importer of pesticides and also the largest consumer, surpassing the United States in recent years. In 2015, according to MAPA data, the country imported 662,743.43 tons of pesticides. In contrast, the sale of pesticides in Brazil, in the same year, moved US$ 9.6 billion, according to the National Union of the Industry of Products for Plant Defense. It should be noted that the pesticide industries benefit from tax incentives, economic instruments to boost certain sectors of the economy, such as reduction of ICMS (Tax on Circulation of Goods and Services), reduction of IPI (Tax on Industrialized Products) and Co-funds (Contribution for the Financing of Social Security). The agrochemical sector has lower taxes than the drug sector. This policy is justified by the fact that foodstuffs will reach the consumer at a lower value.

Brazil today is among the world's largest food exporters. The report presents an overview of this reality with numbers (Grupo de Investigação RBS, 2016, December 6). It reports that, between 2007 and 2013, the increase in consumption of agrochemicals in Brazil was 90.5%, while the planted area grew only 19.5%. In RS, for the same period, the increase in the use of pesticides was 70%, while the planted area increased only 10.1%. With these data, we need to ask: where is all this poison going, if these values are inversely proportional?

According to the report, we also identified that Brazil, between 2000 and 2013, showed a 700% increase in imports of pesticides and that 1.5 thousand pesticides are still awaiting registration in the Anvisa. Primavesi [30] makes it possible to understand these data by emphasizing that this enormous quantity of poisons released into the environment, "[...] perhaps ten to twenty times more than is really necessary, aggravates not only the health of the environment, eliminating natural enemies and pollinating insects, without which there is often no production, but also

the already inferior quality of foodstuffs". We are consuming food with nutritional deficiencies and poisoned, but this criticism about the nutritional quality of food is not found in the reports. Journalists talk about food safety, but they only focus on the excessive use of pesticides.

In the third report, the journalists detail the ease of acquiring pesticides not authorized for use in Brazil by means of contraband. They report that the products can be bought in Paraguay and Uruguay, passing through the border without difficulties (RBS Research Group, December 7). To verify these possibilities, the reporter of the Zero Hora newspaper went to Cidade Del Este, which borders Foz do Iguaçu, to simulate a purchase of pesticides for delivery in Porto Alegre. This reality presented by the RBS Research Group (2016, December 7:25) explains the data reported in the report, such as the "apprehension by Brazilian authorities of 549 tons of smuggled pesticides since 2001". This information also contributes to understand how two types of pesticides not allowed in Brazil were found in the fruit and vegetable farms analyzed by the report.

Finally, we note that the research study Perigo no Prato, in the report Sua Saúde em Risco, did not consider the health of those who apply pesticides to the crops, only of those who eat this food (Grupo de Investigação RBS, December 6). The farm workers, whose bodies are directly impacted by the poisons as they deal with the food that reaches the tables of the gaúchos, are invisible in the report. These people also suffer directly this environmental injustice, because their existence goes hand in hand with the aggressions generated by agrotoxins to their health.

6. Considerations

The series of ZH reports provoked us to observe how journalism addresses the use and consumption of pesticides in Brazil, seeking to understand the place of environmental justice in this process. In this way, environmental justice is a conductor of our Environmental Journalism: engaged, committed to citizenship, which pays attention to the complexity of facts and involves a diversity of knowledge.

Despite the intention to address the risks to human health, the work of ZH does not consider the impacts of pesticides on the entire production chain and ecosystems, in addition to the final consumer. We identified that the agricultural model developed and perpetuated in Brazil, which excessively uses pesticides in the cultivation of food, guided by the concept of the myth of hunger, as verified by the analyzed reports, does not generate autonomy, sovereignty and food security. The latter, specifically, becomes an artifice to prevent social upheavals, that is, so that the citizen who has access to food remains "controlled", regardless of the quality of what he eats. Through the idea of food safety, it is assumed that there is a "safety margin" for consumption, although there are no arguments other than the reference to the law to prove this idea. The vision of the journal, expressed in one of the texts of the series of reports, is that pesticides are indispensable for large-scale production.

The investigative series Perigo no Prato showed a legalistic position in its reports, charging the State for providence and solutions, and failing to involve other actors in this process of controlling pesticides. Environmental issues, being complex,

require an interdisciplinary approach and joint actions that bring together strategies and efforts from different sectors.

In the face of such findings, the perspective of food sovereignty emerges, fully associated with agro-ecology. Environmental Journalism, in turn, identifies itself with this thinking because it contemplates respect for diverse knowledge, which goes beyond the mechanistic technology responsible for homogenizing society and nature, and subjugating all production relations to the international market. It also calls for diversity of voices and for a comprehensive approach to reality and, if this view were to permeate the series of reports, it would certainly complement the research by asserting that responsibility for the quality of human life and, consequently, for environmental justice—insofar as this guarantees equality in the right of access to a healthy environment—does not belong only to the public authorities.

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Conflict of interest: The authors declare no conflict of interest.

Notes

1 The RBS Group (Rede Brasil Sul de Comunicação) team that produces the reports is formed by reporters Car-los Rollsing, Fábio Almeida, Humberto Trezzi, Jeniffer Gularte and José Luis Costa.

2 Ecological modernization is based on trust in scientific and technological development to solve problems.

3 Lutzenberger (1981) calls this the paradigm of modern agriculture because plant productivity is dependent on nitrogen (N), phosphorus (P) and potassium (K), which are macronutrients soluble in water due to the industrial process of acidification. They are used to nourish the plant and not the soil, and must be applied in each sap.

4 Research Group of which the authors of the text are part and that has contributed to the discussions on the classification of the area in Brazil. For more information visit: https://jornalismoemeioambiente.com/.

5 The development of the debate on the specificities of Environmental Journalism can be found in different articles by members of the Research Group (for example, Loose and Girardi [31]; Girardi [3]) and in publications by authors such as Bueno [20], Frome [32], Gelós [25] and Garcia [33].

6 Embora as reportagens só possam ser acessadas por assinantes, a série foi divulgado pelo jornal Zero Hora aqui: https://gauchazh.clicrbs.com.br/grupo-de-investigacao/noti- cia/2016/12/ceasa-vende-alimentos-com-agrotoxico-proibido-inadequado-ou-acima-do-permitido-8614068.html.

7 This information is found in the five reports analyzed.

8 This information is found in the five reports analyzed.

9 Information available on page 11 of the second report entitled Sua saúde sob risco.

10 Information available on page 6 of the first report of the series entitled Invisible Evil.

11 Information available on page 13 of the first report entitled Invisible Evil.

12 Information available on page 36 of Zero Hora newspaper on 9 December 2016.

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