

# PUBLIC POLICY SELECTIVITY IN SOLID WASTE IN THE COVID-19 PANDEMIC: EXPONENTIATING THE VULNERABILITY OF THE WASTE PICKERS' COOPERATIVES IN LONDRINA- PR

## *SELETIVIDADE DA POLÍTICA PÚBLICA EM RESÍDUOS SÓLIDOS NA PANDEMIA DA COVID-19: EXPONENCIANDO A VULNERABILIDADE DAS COOPERATIVAS DE CATADORES EM LONDRINA- PR*

Submission: 30/03/2021

Accept: 20/08/2021

Felipe Nepomuceno Coimbra Santos<sup>1</sup>  
Benilson Borinelli<sup>1</sup>  
Caroline Nayara Marilac Flor<sup>1</sup>  
Lilian Aligleri<sup>1</sup>

*1 Universidade Estadual de Londrina – UEL. Londrina, Paraná, Brazil.*

## ABSTRACT

**Purpose:** This article aimed to understand how the actions of the local state, given the pandemic scenario, produce structural selectivity in the sector of Waste Cooperatives in the face of coping with COVID-19 in the municipality of Londrina, State of Paraná.

**Design/methodology/approach:** The study stands out as exploratory-descriptive and qualitative, using primary and secondary data extracted mainly from questionnaires registered with representatives of recycling cooperatives and official documents. We conducted structured interviews with leaders/representatives of 6 of the 7 cooperatives that have a service contract with the City of Londrina, between May 28 and June 9, 2020.

**Findings:** Data analysis showed combined mechanisms of state selectivity (structure, ideology, processes, and coercion) that favor some actors and hinder access to others. The selectivity promoted by the State during the pandemic aggravated the crisis that was already developing locally in the sector. Although cooperatives have been affected in different ways, selectivity contributes in general to the greater dismantling of the sector and may even imply the unfeasibility of some of these social organizations.

**Originality/value:** The study made it possible to analyze the existence of the concept of selectivity of the State, from a set of interests and actors involved in the state apparatus at a time of major health crisis. The study aims to contribute to the debate of public policies and actions to confront the COVID-19 in a sector considered essential to the well-being of society, by exposing the sectoral needs and actions or inactions of the federal government in structural selectivity.

**Keywords:** Waste Management; Selectivity; Vulnerability; COVID-19; Public Policy.



## RESUMO

**Objetivo:** Este artigo objetivou compreender como as ações do Estado local, frente ao cenário pandêmico, produzem a seletividade estrutural no setor de Cooperativas de Resíduos face ao enfrentamento da covid-19 no Município de Londrina-PR.

**Procedimentos Metodológicos:** O estudo caracteriza-se como exploratório-descritivo e qualitativo, utilizando-se de dados primários e secundários extraídos, principalmente, dos questionários aplicados com representantes de cooperativas de reciclagem e de documentos oficiais. Realizamos a aplicação dos questionários com dirigentes/representantes de 6 das 7 cooperativas que possuem contrato de prestação de serviço com a Prefeitura de Londrina, entre 28 maio e 09 de junho de 2020.

**Principais Resultados:** A análise dos dados mostrou mecanismos combinados de seletividade estatal (estrutura, ideologia, processos e coerção) que favorecem alguns atores e dificultam o acesso a outros. A seletividade promovida pelo Estado durante a pandemia agravou a crise que já se desenvolvia localmente no setor. Embora o cooperativismo tenha sido afetado de diferentes formas, a seletividade contribui em geral para o maior desmantelamento do setor e pode até implicar na inviabilidade de algumas dessas organizações sociais.

**Originalidade/Valor:** O estudo possibilitou analisar a existência do conceito de seletividade do Estado, a partir de um conjunto de interesses e atores envolvidos no aparato estatal em um momento de grande crise de saúde. O estudo visa contribuir para o debate de políticas públicas e ações de enfrentamento à covid-19 em um setor considerado essencial para o bem-estar da sociedade, expondo as necessidades setoriais e ações ou inações do governo federal em seletividade estrutural.

**Palavras-chaves:** Gestão de Resíduos; Seletividade; Vulnerabilidade; Covid-19; Política Pública.

## 1 INTRODUCTION

The COVID-19 pandemic has been challenging the Brazilian State's economic and political functions while allowing us to assess how inequalities and injustices are faced and/or deepened on various fronts of intervention and levels of government. One of those fronts is waste management. This sector is considered essential due to its relationship with public health, becoming even more relevant in the pandemic period due to the need for collection and final disposal of municipal waste in the context of high risk of virus spread. The pandemic required a redefinition of the collection system and instruments, because of the uncertainties related to the virus transmission, the essentialness of the sector, and the exposure of already vulnerable workers, the waste pickers (Ziglio, 2020).

The selective collection of household waste after consumption is one of the instruments provided for in the National Solid Waste Policy, No. 12305/10, which recognizes reusable and recyclable solid waste as an economic good with social value, generating work and income, and promoting citizenship. Cooperatives and waste pickers' associations are considered as executors of public utility functions and with relevance to the environmental interest, both in the selective collection system and in the recycling process.

Municipal solid waste management is one of the most challenging topics on the local public policy agenda, as it combines patterns of production, hyperconsumption, poverty, environmental degradation, and inequalities at various scales and social spheres (Aligleri, Borinelli & Santos, 2020). In general, recycling cooperatives and associations are constituted of people more susceptible to social, economic, and political vulnerability conditions. Besides, many members are part of risk groups, both by age and by chronic diseases. (Dagnino, Johansen, 2017; Souza, Muto, Nascimento, *et al.*, 2020).

These factors and the condition of dealing directly with contaminated material put workers in a position at high risk of COVID-19 contamination, generating fear, insecurity, and additional suffering. "SARS-CoV-2 was more stable on plastic and stainless steel than on copper and cardboard,



and the viable virus was detected up to 72 hours after application to these surfaces” (Van Doremalen, Bushmaker, Morris, *et al.*, 2020, p.1). According to recent data from the Brazilian Association of Sanitary and Environmental Engineering (ABES), the rate of contamination of municipal cleaning workers (per 100,000 inhabitants) in several Brazilian capitals is higher than the contamination rate of their respective populations. “This fact corroborates the urgent need for the implementation of monitoring, information, testing, and dissemination systems, and regulation of protocols and measures for the prevention against coronavirus to be adopted in municipal cleaning services” (ABES, 2020).

Brazilian Federal Law No. 13979/2020 defined measures to combat the public health emergency and Executive Order No. 10282/2020 safeguarded the waste collection from public services and essential activities. Despite the recommendations, state and municipal governments present different responses to the conditions of waste management during the pandemic, as pointed out by the study by Dias, Abussafy, Gonçalves, *et al.* (2020), which demonstrates the sector’s difficulty of articulation.

In the State of Paraná, the Public Prosecutor’s Office issued three administrative recommendations in different judicial circuits, aimed at preserving the rights of waste pickers of recyclable and reusable materials, requesting, among other measures, an information and action emergency survey to protect the health of waste pickers and assistance to all cooperatives.

The city of Londrina, located in the north of Paraná, is the fourth-largest municipality in the southern region of the country, with approximately 563,943 inhabitants (IBGE, 2018). The local Executive Branch declared an emergency in the city on March 19, 2020 (Executive Order No. 346). The City Hall, as a measure to cope with the pandemic, established social isolation at different times during 2020, closing local commerce and public parks to prioritize essential services. However, the municipality has been notable for the almost systematic absence of specific policies in waste management for this exceptional period. The inaction in the implementation of public policies for the sector has revealed the enormous challenges of articulation and coordination of the political governance arrangement to evidence a strong asymmetry of economic, political, and symbolic power among local agents, which demonstrates the new facets of structural selectivity promoted by the local government (Jessop, 2016).

The city of Londrina is recognized as one of the pioneers in the selective collection of solid waste in the state of Paraná. The city’s selective collection system started in the late 1990s and was awarded and appointed as a national reference in the sector in the 2000s. The consolidation of the activity was the result of decades of struggles and achievements for community and popular movements. Supported by the Public Prosecutor’s Office, federal legislation, and some municipal administrations, seven waste pickers’ cooperatives currently have contracts with the City Hall to collect and process recyclable waste from 100% of municipal households. Despite the achievements, the cooperatives are mostly composed of workers with a low education level that receive less than a monthly minimum wage. Since 2016, the London selective collection sector has been going through a crisis mainly due to the systematic decrease in the volume of processed material and, consequently, the revenues, besides the deficiency in waste management (Borinelli, Aligleri & Santos, 2019). It is in this context of disruption and decapitalization of the selective collection sector that Londrina entered the pandemic.

With this article, we seek to understand how the actions of the local government, given the pandemic, produce structural selectivity in the sector of Waste Cooperatives while fighting COVID-19 in the municipality of Londrina, State of Paraná. Together with the cooperatives, we raised the operational, political, and economic conditions existing at the beginning of the pandemic (between March and September 2020), and the actions of the State concerning the selective waste collection sector.

The study aims to contribute to the debate of public policies and actions to confront the COVID-19 in a sector considered essential to the well-being of society, by exposing the sectoral needs and actions or inactions of the State in structural selectivity. We also hope to give visibility to



new features of suffering, violence and environmental injustice engendered by the pandemic and imposed on the population of waste pickers organized or not in cooperatives, historically marked by exclusion. The hope is that we can offer a critical evaluation of Londrina's experience and generate reflections that contribute to promoting public policies based on effectiveness, for the defense of the rights of all and social justice in the selective collection of waste from the city.

The sequence of this article is divided into four moments. First, we describe the methodology used in the study. In the theoretical framework, we interpret, in dialog with the literature on State selectivity, the moment of the recycling field of the city, especially the selective collection sector. Subsequently, we analyze the data according to the categories presented and, finally, we developed the final considerations.

## 2 THEORETICAL PERSPECTIVE

### 2.1 Aspects of Solid Waste Management

The Brazilian National Solid Waste Policy (PNRS) was approved in 2010, after twenty-one years of discussions in the National Congress, through Law No. 12305/10. The policy marked the beginning of a strong institutional articulation involving the three federated entities – Union, States, and Municipalities –, the productive sector and society in general. Among the ways to collect and recover recyclable waste and return it to the industry as raw material, the door-to-door collection is the most common in Brazilian municipalities (SNIS, 2019). Both the public service provider of cleaning and management of solid waste, from the public and private sector, as well as by associations or cooperatives of waste pickers of recyclable materials can perform it.

Solid waste management is characterized by limited advances and stagnation. Being an interdisciplinary subject of extreme complexity, the completeness of a decade of this public policy brings reflections on what was accomplished in the period, what are the flaws, and which paths to follow due to the commitment to the 2030 Agenda, to which Brazil is a signatory (Pugliesi, Santiago & Leite, 2020).

Selective waste collection is based on the separation of recyclable materials, such as plastics, glass, papers, metals, and others, which are found in various sources of generating agents such as houses, businesses, schools, commerce, industries, and health units, to collect and route to recycling. In general, waste pickers are responsible for the initial phases, which are of higher risk, the most dependent, and the poorest paid in the process (Ministry of the Environment, 2020).

One of the highlights of institutional support that has been given to the cooperative sector is Executive Order No. 740410, which articulates the Actions of the Federal Government aimed at supporting and fostering the productive organization of waste pickers of reusable and recyclable materials, improving working conditions, expanding opportunities for social and economic inclusion, and expanding selective collection, reuse and recycling of solid waste through the performance of this segment (Planalto, 2010).

However, the recycling sector is established as a precarious field of experience and instability for the cooperative worker. Latin America is one of the regions of the world that experience an intense and chronic precariousness of the management of municipal solid waste, with systems of collection, transportation, and disposal of garbage (Pereira & Góis, 2016). Thus, the State, at its various levels, plays a central role in the configuration, destabilization, and re-stabilization of relations within the fields, especially those coming from important non-state fields. In its structure and actions, the State expresses the result of a relationship of forces and a selectivity that privileges some agents and interests and excludes others in specific contexts and degrees (Aligleri, Borinelli &



Santos, 2020). The critical event of the pandemic, although tragic, is an opportunity to analyze how these forces are configured and how the State acts in the correct contaminated waste disposal, in social support to the most vulnerable workers as a way to ensure their rights and prevent the spread of the new coronavirus.

## 2.2 The State as a Selectivity Operator

Jessop (2016) defines the State as a complex compound of institutions, organizations, and interactions involved in the exercise of political leadership and decision-making. These institutions and organizations are socially incorporated, socially regulated, and strategically selective, whose socially accepted function is to define and apply collectively binding decisions on the members of society. The State also has space-time disparate extensions and horizons of action, in which it moves a series of abilities and resources in pursuit of state objectives. For Poulantzas (1978), the State is a social relationship and is far from a neutral instrument.

The State, in its exercise and performance, is a contingent product of a changing balance of political forces located within and beyond the State. Such balancing is dependent on the organization of its institutional structures and specific procedures of the State system, involved in the political system and the surrounding social relations (Jessop, 2007). Jessop defines selectivity as the performance of embedded prejudices that favor some agents and interests over others. He adds that how and to what extent these prejudices are updated depends on changing the balance of forces and their strategies and tactics (Jessop, 2016).

Selectivity is presented in the State as a structure and *modus operandi*, being more susceptible to some types of policies and agents, and less to others. According to the strategies, the agents organize themselves to influence the power of the State, developing strategies and/or economic policies that produce differential effects, benefits, and losses. In this condition, selectivity is more strategic than structural (Jessop, 2002).

Offe (1984) presents us which selection mechanisms are used by the State in decision-making processes. They are institutionally entrenched and can be understood on four levels: structure, ideology, process, and repression. In the mechanism of the structure, we understand that the institutional system has a defined radius of action established through laws, where it is determined who or what can become the objective of state policy. This structure operates when it provides access to resources and information in a restricted way to some agents. We can understand it as a program that has the rules of selection within itself, establishing the premises and obstacles of action, exposing a space of action, or creation of a possible policy.

Ideology is articulated in political institutions, even those that present themselves more openly and flexibly. If the structure is the space of possibility, the restriction of the system occurs in ideology, through ideological and cultural norms. The process mechanism consists of institutionalized procedures in political practice. The structure conducts this process to provide certain agents with conditions of greater achievements and special treatment in certain interests, giving them preference over time and creating possibilities for specific power practices. Finally, repression is presented in the application of repressive and authoritarian acts through the bodies that represent the police, the military, or justice (Offe, 1984).

By using selectivity, Offe (1984) says that it is necessary to be able to analyze events that are outside the rules of exclusion. Decisions that are not implemented are as important in political decisions as decisions that are explicitly adopted in the system. According to the author, “non-decision” makes politics more significant than the events evidenced. About municipal selective waste



collection arrangements, cooperatives and recycling associations have little power in this system. Their members represent people most susceptible to the conditions of social, economic, and political vulnerabilities (Fergutz, Dias, & Mitlin, 2011; Souza, Paula & Souza-Pinto, 2012), which suggests that the sector is the object of greater selectivity of the State in Brazil.

### 2.3 History of Selective Waste Collection System of the Municipality of Londrina

The body responsible for waste management of the city is the Municipal Traffic and Urbanization Company of Londrina – CMTU. Established in 1993, the private mixed-economy corporation holds a wide and varied range of assignments covering the areas of public transportation, transit, municipal cleaning, and waste management, mostly outsourced to private companies. CMTU took over solid waste management in 2001, with the assignment of “managing municipal cleaning and solid waste management services, practicing all functions of planning, controlling, and supervising services” and “directly managing and exploring selective waste collection and recycling services” (Law No. 8388 of 2001).

Since 2013, Kurica Ambiental S/A performs the waste collection system that is intended for landfills. On the other hand, the selective collection is carried out door-to-door by 7 cooperatives that, based on a contract signed with the municipality, operate in different locations in the urban territory to attend 100% of the residences in the urban area. The cooperatives complement the revenue stemming from the payment for the collection per household, carried out by the City Hall, with the resources of the commercialization of recyclable materials.

The drop of about 45% in the mass of recycled/commercialized waste by cooperatives, from 10.5% to 5.7%, between 2016 and 2018 (CMTU, 2019), was one of the main pieces of evidence of the crisis that the sector experienced before the pandemic. This crisis also reflected the disordered entry of informal waste pickers into the system, the systematic lack of planning and channels of participation, and the removal of an important agent and protagonist in the field and main representative of the demands of the cooperatives, the State Prosecutor’s Office (Aligleri, Borinelli & Santos, 2020). After several declarations, promises and suspensions, Londrina does not yet have its Municipal Plan for Integrated Solid Waste Management (PMGIRS), requested by PNRS and which should be completed in 2012.

Among the specific responses to the problems faced by the sector, including operational deficiencies of cooperatives aggravated by the decrease in revenues since 2016, the most controversial was the CMTU’s unilateral decision to privatize the collection of recyclable waste months before the pandemic (Folha de Londrina, 2020). Although much criticized by civil society and cooperatives’ representatives and by experts for counteracting the principles of the National Solid Waste Policy and compromising the economic viability of cooperatives, the proposal was not withdrawn and discussions were suspended with the beginning of the pandemic.

## 3 RESEARCH METHODOLOGY

The study is characterized as exploratory-descriptive and predominantly qualitative (Triviños, 1987). The research sought an understanding of the situational characteristics, as well as the operational and environmental challenges faced by waste recycling cooperatives in Londrina during the first six months of the COVID-19 pandemic. To capture the relationships of discrimination and exposure of waste pickers to the risks of the pandemic period, we took the notion of selectivity in Jessop (2016) and Offe (1984) as the general category of analysis. From it, the study included four mechanisms of selectivity: structure, process, ideology, and repression. These mechanisms were



identified and analyzed in the light of the relationships between impacts and aspects of the operational, economic, and political dimensions in cooperatives resulting from the pandemic, and the responses given by the local government.

The collection comprised primary and secondary data extracted mainly from questionnaires applied with representatives of recycling cooperatives and from official documents. We analyzed documents such as administrative orders of the CMTU, demands of the Municipal Council of the Environment (CONSEMMA), recommendations of the Public Ministry of Paraná – MP-PR, federal and municipal laws, as well as contents from the City Hall and CMTU official websites. The situation of cooperatives during the pandemic was assessed by applying a questionnaire to managers/representatives of 6 of the 7 cooperatives that have a service contract with the City of Londrina. The questionnaire was applied between May 28 and June 9, 2020, and recorded through Google Meet, WhatsApp, or by phone call. To safeguard the confidentiality of the participants and their respective organizations, the units were named from C1 to C6.

Data treatment and analysis comprised two main moments when we used descriptive and content statistical analysis in different ways. In the first, we addressed the operational and economic impacts of the pandemic on cooperatives, articulating quantitative and qualitative data from the questionnaire. With this, it was possible to identify, measure the scope, and describe the various forms of vulnerabilities and violence originated and/or aggravated by the pandemic in cooperatives. In a second moment, combining the theoretical framework, the answers to the questionnaires about how the State acted, and official documents, we explore the political dimension of the process. In this part, we try to demonstrate how, denying the problems and resisting the demands of cooperatives, CONSEMMA, and other instances of the State, local power (re)produced selectivity through structure, processes, ideology, and repression.

## 4 ANALYSIS OF RESULTS

In this part, we present and discuss the results of the field research. In the two subsequent topics, we address the operational and economic impacts of COVID-19 on the activities of the Recycling Cooperatives of Londrina from data collected together with these organizations. Next, we analyze political and public policy aspects to highlight the configuration and some implications of selectivity that occurred.

### 4.1 Operational dimension: employee leave, overcrowding, risk, and fear

In the operational dimension, we evaluated the impacts that the pandemic provided on routine activities such as the removal of members, the risks associated with the activities, and the volume of waste collected. As stated above, the survey was conducted in 6 of the 7 cooperatives that operate in the city: Cooperative 1, with 45 members; Cooperative 2, with 140 members; Cooperative 3, with 30 members; Cooperative 4, with 36 members, Cooperative 5, with 38 members; and Cooperative 6, with 27 members.

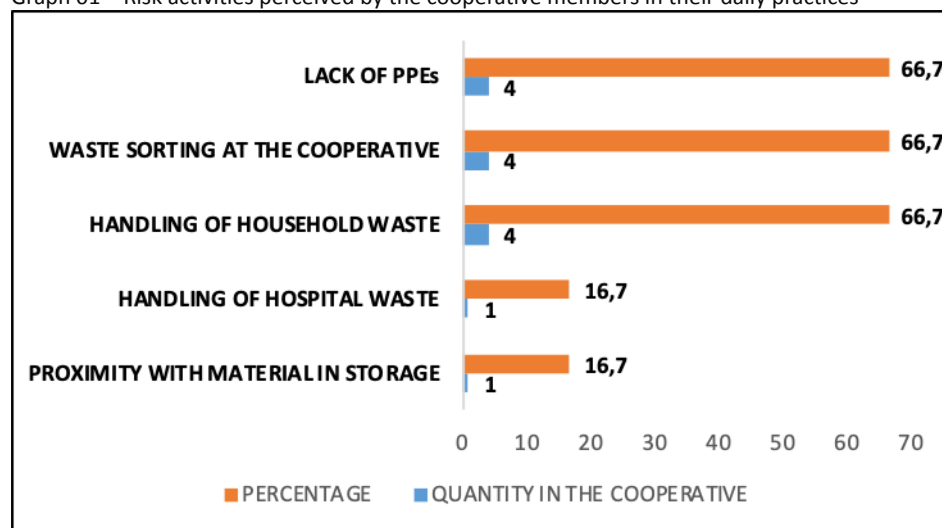
Regarding the removal of members due to belonging to the risk groups, 3 cooperatives had an average of 23% of leave, and another 3 an average of 10%. Subsequently, the number of members who were removed because they presented symptoms of COVID-19 was assessed. Four cooperatives had an average of 25% of absences and 2 with no leave. It is important to highlight that the absences did not occur simultaneously and that the same cooperative member may have been registered in both categories at different times. But when crossing with the number of cooperative members that each cooperative has, we can observe the dimension of this impact on activities.



Londrina was negatively noted in the study conducted by Dias, et al. (2020), which analyzed the prevention and mapping protocols on cases of waste pickers with COVID-19. The work covered the period from 03/30/2020 to 04/06/2020 and collected data in 140 Brazilian cooperatives. We found 51 suspected cases and confirmation but, of the suspected cases, only 4 had access to the immunological test provided by SUS. The highest occurrence of suspected cases was in Londrina, with 16 suspected cases and none confirmed by test until the closing date of the study.

Graph 01 shows the activities and risk conditions perceived by the cooperative members in the operations of recycling cooperatives during the pandemic.

Graph 01 – Risk activities perceived by the cooperative members in their daily practices



Source: Prepared by the authors, based on field research.

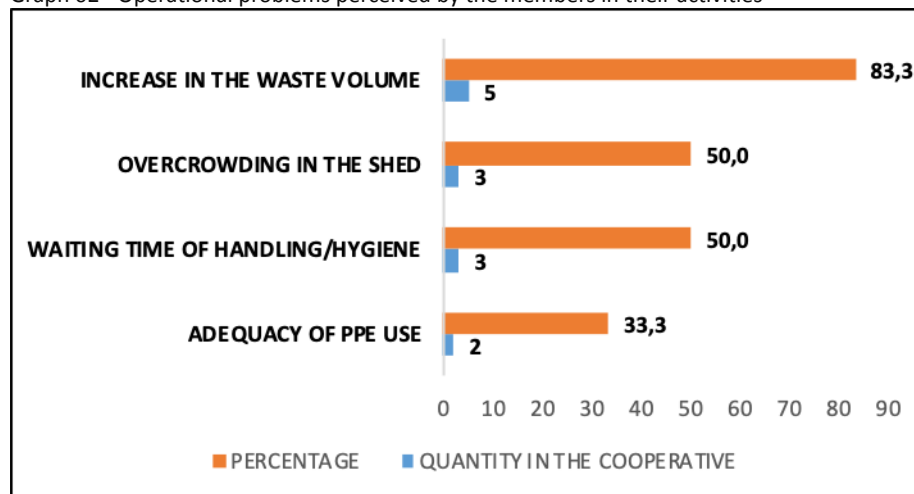
The activities at greatest risk were the lack of personal protective equipment (PPEs), the separation of waste, and the handling of hospital waste. This may be related to the fact that cooperatives do not know if the waste being handled is contaminated, and in the absence of adequate PPEs, the situation increases the uncertainty and vulnerability of waste pickers during work.

The risk we are taking is that there is a lot of glove and mask that people wear and put in the recycled, you know. People wear the mask and, instead of discarding it in the trash, that is what goes to the landfill, which is organic or ordinary waste, they are putting inside the recycled to come to the shed, this is a very big risk for cooperative members. (C4) [...] so the greatest risk that we can perceive, and that we were more afraid of, is in the separation. Because it is when you touch any material that arrives. (C6)



Graph 02 shows the main operational problems pointed out by the cooperatives.

Graph 02 - Operational problems perceived by the members in their activities



Source: Prepared by the authors, based on field research.

The questionnaires showed that cooperatives experience several difficulties due to the increase in the mass of waste collected, a direct consequence of the pandemic for which the vast majority of cooperatives were not prepared. Half of the cooperatives were left with overcrowded sheds, making it difficult to manage, sort, and store the materials. Three cooperatives indicated to use a storage time of 72 hours before the handling of materials, which impacted the processes, generating operational problems. The longer waiting time contributes to the accumulation of waste and overcrowding of the sheds, which can even attract disease vectors such as rats. Another aspect was the adequacy of PPEs. Usually, the cooperative members wear masks and gloves in the sorting. In the COVID-19 scenario, they started to use more PPEs as glasses and aprons and, with this, a re-adjustment was necessary.

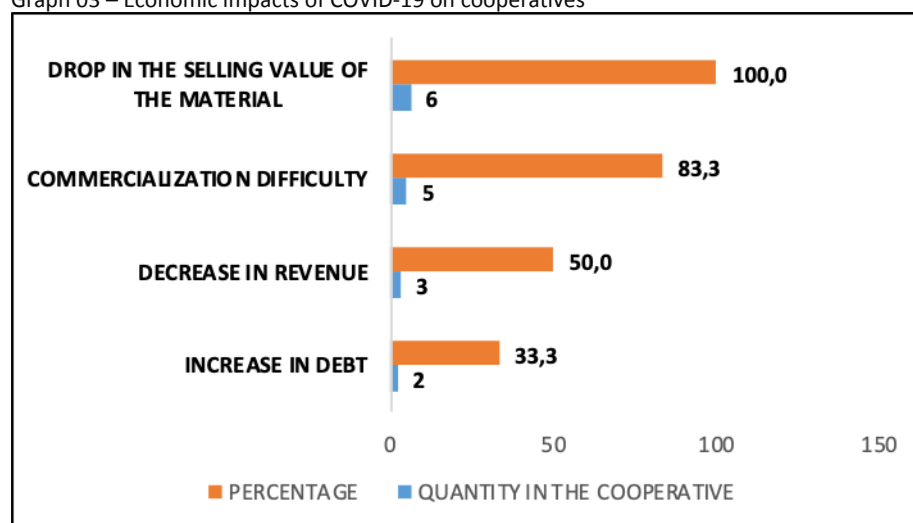
[...] we ended up having overcrowding in the sheds, we hired two more sheds to be able to supply, but we only receive in one, so the sheds are crowded. The cooperative members sometimes end up getting in the middle of recycling, there is no way to have a space for them because it is too much garbage. We ended up having to enter with a debt of two sheds without being able to, and then the street transshipment material ended up being affected. (C1)  
 The sorting, on the glove part, we wore a glove made of cloth, more or less like this... Today we have to buy the disposable glove. (C3)

#### 4.2 Economic dimension: less revenue and more indebtedness

COVID-19 had a major impact on the economic structure of cooperatives. The increased waste flow, the need for a longer storage time of the materials for subsequent handling, and the difficulty of commercialization provided a cascading effect of financial disruption of several cooperatives.



Graph 03 – Economic impacts of COVID-19 on cooperatives



Source: Prepared by the authors, based on field research.

Social isolation and quarantine requests in Londrina had impacts on cooperatives in the commercialization of waste. With the effect of the pandemic throughout the country, it was difficult to access buyers, which generated obstacles in the sale of many materials and the fall in commercialized values. This process resulted in the accumulation of debts and, consequently, struggles to keep cooperatives running. The scenario is reflected in the testimony of one of the cooperatives.

[...] affected everything, our material is practically idle, almost no buyer wants to come to pick it up, and we have many debts. We had commitments both with material and with the values that the City Hall passes to us. [...], but it is very complex, very stagnant, we are going through great difficulties. We are not being able to honor our commitments.” (C3)

This situation was also verified by Dias *et al.* (2020) in the study on the impacts of the COVID-19 pandemic on inclusive recycling in Brazil. In the scenario surveyed by the authors, a decrease of at least 20% in the value of the commercialized material was verified. The study also showed a critical economic situation of cooperatives in the face of crisis. The difficulty experienced by cooperatives generated problems in maintaining their physical structures and in providing financial support to absent members. Of the six cooperatives studied, two had, on average, a 65% drop in revenue, two had an average reduction of 45% in revenue, and two had 8.5%, compared to the pre-pandemic period. Therefore, the pandemic affected cooperatives differently, even though they were in the same municipality. This situation portrays the different financial and economic conditions between them and also the varied abilities to respond to the crisis. The report of one of the cooperatives is that due to the reduction in sales of materials, there are no salaries or the possibility of paying extra expenses originated from the rent of new sheds and the purchase of PPEs and sanitizing products.

[...] we kept working, but the buyers stopped working, and that is when we ended up with no salary. Many members were left unpaid. We had to take the amount that came from the City Hall, which was to pay water, electricity, and taxes, we had to take it and pass it on to the members. So today the cooperative... it is like, in a very critical situation, because we go into debt. (C2)

### 4.3 Dimension of public policy: absence as a policy

the dimension of public policies sought to understand how cooperatives evaluate the State and identify the actions of the local government during the pandemic. Five of the six cooperatives pointed out that there did not have the support needed to cope with the crisis. In the survey of the extraordinary actions undertaken by the State to account for the exceptionalities brought by the pandemic, few were identified in the responses of the cooperatives. Guidelines were highlighted via telephone to one cooperative, by letter to another, and the donation of a mask for each cooperative member.

There is no support from the CMTU. No one from the City Hall has spoken. They are behaving like nothing is happening; they talk about the virus, but they do not talk about the needs of the cooperatives. The cooperatives have not been removed even for a moment. We have made a written statement asking for support and so far, they have not spoken. Only at the beginning, they gave a mask for each and nothing more. (C3)

Two of the six cooperatives pointed out the lack of dialog and technical guidance, as well as the absence of the supply of PPEs materials, as the main failures of the government in the pandemic period. Adding to those failures, there is no financial support, no assessment of difficulties, there are many fines, and the non-notification of individual waste pickers who operate clandestinely in the door-to-door collection system.

[...] because they couldn't help us at all. The flaw would be in the matter of having communicated the cooperatives, and a meet-up, right. As we are part of the essential services, we should have informed the president of the cooperative, which is in the front line, to say what is the greatest difficulty they are having. (C1)

Regarding the current demands indicated by the cooperatives, the financial difficulties and the need for assistance to adapt the physical structures were the most cited requests. Three of the six cooperatives indicated the need for financial assistance for debt costing and for new material storage locations. On the other hand, the mapping of the needs and difficulties of cooperatives by the public authorities, the support for access to PPEs, and the lack of dialog with the body responsible for municipal waste management were pointed out by two cooperatives. Finally, the orientation to the population on waste disposal, the notification of individual waste pickers, and the visit of the sheds were demands perceived by one cooperative in each category.

The little we get from the contract, they get back through fines, they only know how to fine us. They see that there's some material out of the shed, they see that there's exposed material. They want us to put it in but there's no room to put it. We are already "stuffed" with material, both for sorting and selling. When we ask them for a solution, they simply tell us to solve it. (C4)

It is possible to observe the lack of policies consistent with the pandemic moment, which suggests a failure in the governance of a sector that is, at the same time, essential and historically vulnerable (Souza, Paula, Souza-Pinto, 2012; Candido, Soulé & Neto, 2018). The survey of the actions of the local government for the sector in official channels of the City Hall, CMTU, and local newspapers confirm the cooperatives' testimonies. In consultation with the City Hall, CMTU, and SEMA websites, almost three months after the beginning of the pandemic, no specific program directed to the waste sector, nor information campaign to the population was found. On the homepage of



the City Hall's website there was a carousel entitled "What you need to know about coronavirus in Londrina", which brought information about the COVID-19, including aid, data, legislation, actions to prevent, and answering questions service, but no mention for the waste treatment and disposal (Londrina, 2020). We found only one action of CMTU consisting of a note on the website of the municipality, dated 05/19/2020, that advises on the proper disposal of masks and gloves (CMTU, 2020). It is noteworthy that the note was not highlighted on the website and it was only possible to find it using the search engine.

Besides refusing to meet the demands of some cooperatives, the City Hall and CMTU also gave little effect to the recommendations and requests of other public agencies. This was the case of the recommendations issued by the Public Prosecutor's Office of Paraná – MP-PR (No. 01/2020-GAEMA, 03/24/2020; No. 02/2020, 03/26/2020; No. 01/2020, 03/25/2020). In short, the recommendations of the MP-PR demanded an emergency information survey, assistance measures to all cooperatives, and the provision of additional temporary and/or subsidized social aid in favor of waste pickers during the pandemic period. Those measures were adopted in several other states and municipalities during the pandemic (DIAS, et al. 2020). Besides the recommendations of the Public Prosecutor's Office, the Municipal Council of the Environment (CONSEMMA, 2020) sent a letter (No. 04/2020 of 05/27/2020) to the CMTU, giving recommendations and demanding a contingency plan for cooperatives. Through an administrative order (No. 1020/2020 of 06/15/2020), CMTU stated that from the first moment it contacted and guided the cooperatives regarding the use of PPEs and forwarding, in March 2020, the contact of companies that could provide personal protection materials and that had it in storage, as well as information about Federal Government's emergency aid. Thus, that order shifts responsibility to another government instance and uses the argument of illegality to justify its inaction:(...) on the guarantee of the minimum wage to waste pickers, we shall emphasize that the Federal Government had already taken the initiative and instituted welfare programs in this sense, as determined by the Federal Constitution. Considering that the cooperatives are duly contracted, the Public Administration cannot afford costs beyond those described in the respective terms of reference and contracts, under penalty of the configuration of an act of misconduct, after the expense of public funds to the cost of expenses not provided for by the legislation, as well as any legally taken obligation. (Londrina City Hall, 2020, p. 3).

In a statement to the media at the beginning of the pandemic, CMTU also stated that "the remuneration passed on to cooperatives and the outsourced company, Kurika Ambiental, includes personal protective equipment" (Folha de Londrina, 2020). By adopting this position, the government disregards the health of workers of that sector and the extraordinary effects caused in the routine and collection and screening activities of cooperatives, which forced them to take on new costs, uncertainties, and risks to continue providing an essential service. Moreover, even knowing well the precarious economic situation of the vast majority of cooperatives and the crisis in the pre-pandemic sector, the City Hall decided to match them with the large company that collects the raw waste, which was greatly benefited by the increase in the volume of waste that occurred at the beginning of the pandemic.

We must highlight that, like other Brazilian cities (Dias, et al. 2020), some municipalities in Paraná had different positions in waste policies in the face of the pandemic. In the city of Curitiba, for example, a formal special procedures protocol for municipal solid waste management in the pandemic period was developed. The protocol guides all agents involved, especially associations and cooperatives, on waste management and sorting practices, sanitary measures, and the maintenance of the transfer to cooperatives, including those that decided to temporarily stop the activities (Curitiba City Hall, 2020). The city of Foz do Iguaçu, with less than half of the population of Londrina, created a program to support cooperatives, with the help in identifying and assessing risks in the selective collection, and protecting workers from those risks, making available PPEs and sanitizing products, and accessibility to the municipality's activities schedule regarding the COVID-19 shift (Executive Order



No. 28.149). In Ponta Grossa, the Municipal Council for the Defense of the Environment approved in minutes the donation of PPE, gel alcohol, liquid soap, and basic food baskets to cooperatives, claiming the vulnerability brought by the pandemic (Condema, 2020).

As we stated earlier, the State is a dynamic expression of the condensation of relations of forces and public policies reveal in their selectivity who are the winners and losers in accessing resources and public powers (Jessop, 2016). Based on the selectivity mechanisms presented by Offe (1984) – structure, ideology, process, and repression –, we make a brief reading below on how political selectivity developed so far in the case presented.

Concerning the structure, recycling cooperatives historically have not had formal channels of participation in the construction of the public agenda, controlled by CMTU, a municipal organization not very open to social control. Obstructed and fragmented access to the State structure became more evident and harmful during the pandemic. In this aspect, there is a structure that excludes one of the most important and most vulnerable agents in the municipal waste management process from the space of discussion and decision, pushing it to a passive receiver status. The structure operates selectively when it has access to resources and information, in a way restricted to some agents (Offe, 1984).

In the ideological sphere, the conservative and neoliberal inclination of the current management partly explains its indifference towards popular organizations and its interest in privatizing recycled waste collection services. The privatizing project is also revealed when, disregarding the precariousness of the sector, treats cooperatives as autonomous and independent companies, turning invisible the structural social inequality to justify its inaction in face of the risks and struggles suffered by waste pickers. This ideological mechanism restricts the possibilities by promoting the selective perception of conflicts, as well as sustaining exclusionary solutions. As Offe (1984) says, it is in ideology that the system is restricted through ideological and cultural norms, in which it promotes a selective perception of social problems and conflicts.

Process mechanisms, according to Offe (1984), are instituted through the structures that determine planning and bureaucratic administration activities. The structures achieve the objective of selectivity when it confers differentiated conditions for the agents in accessing the state power. When one creates such a greater-access condition, the procedural rule inversely creates a space of exclusion for certain groups. The centralized nature of the decision-making process of the sector in Londrina is historical, systematically excluding cooperatives and other agents from important decisions. A type of bureaucratic isolation and low social control partly explains the CMTU's systematic denial in meeting the recommendations and requests mentioned above, its resistance to elaborate the PMGIRS, and the non-implementation of the Municipal Committee for Selective Garbage Collection, created in 2009 (Executive Order No. 829).

According to Offe (1984), the repression will occur through coercive acts of the State, which are instituted from applications or threats using the police or judicial force. In this respect, the threats of sanctions and the fines imposed for overcrowding sheds were the ones that best illustrated repression as a mechanism of selectivity. Thus, through procedural and institutional mechanisms, the State decides which forces and which agents will be privileged and which will be left to its own devices. Its effectiveness will depend on links to forces and powers that exist and operate beyond the formal borders of the State (JESSOP, 2016). In this sense, a broader understanding of the unfavorable position of cooperatives in the relationship with the local government also needs to consider the fragmentation and conflicts that mark the formation and development of the recycling sector in Londrina (Borinelli, Aligleri & Santos, 2019; Aligleri, Borinelli & Santos, 2020), weakening politically and economically the abilities and possibility of defending a collective project in the public agenda.



Given what was exposed, we can observe that the scenario of the selective collection sector of the municipality of Londrina during the COVID-19 pandemic presents very serious and unusual aspects. Several cooperatives are in precarious conditions and more exposed to health risks and other sufferings aroused and aggravated by the pandemic. It was possible to observe that, most likely, the current situation has been contributing to deepening the asymmetry between cooperatives (Borinelli, Aligleri & Santos, 2019) and may even render their operations unfeasible. The lack of effective policies and the inaction of the State, before and during the pandemic, has as one of its effects the dismantling of the sector of popular cooperatives and reveals, dramatically at that moment, the systematic indifference and disrespect for the lives of those workers:

Unfortunately, we are looked at as hungry, as the little ones, as problematic, as we only give costs to the municipality, only give expense. Of course, everyone is flawed, but we are more flawed, more than anything on the face of the earth. Unfortunately, we are seen that way but when it is about money, about fines, about these things... then we are treated as a company, as entrepreneurs. [...] all we need, at first, is respect. (C3)

It surprises the resistance of the municipal government, its insistence on treating as non-reality (Offe, 1984) the exceptional character of the moment, the historical vulnerability of waste pickers and their organizations, and the critical character of waste management in pandemic control policies. However, the most paradoxical of the speech of appeal to the “legality” of contracts with cooperatives as a central argument for doing almost “nothing” and to not managing is the systematic and selective non-compliance of the sector’s legislation by the municipal government. More notable examples of this are the non-preparation of the PMGIRS and other PNRS directives, the low willingness to solve the crisis and regulate the sector, and the disregard of the possibility of reviewing values contracted with cooperatives in extraordinary cases, when “occurrence of facts not provided for in the contract, outside the control of the service provider, which alter its economic-financial balance” (Art. 29, item II of the Municipal Basic Sanitation Policy, Law No. 10967/2010).

The case of Londrina illustrates and updates historical traits that characterize our exclusionary citizenship in many places. The public machine reverberates elitist principles that define who is above and who is under the law, the citizens of “first-class” and “third-class” (Carvalho, 2001). Denying the facts, inequality and violence are reproduced by leveling unequal parties, treating, when convenient, cooperatives and waste pickers as large prosperous companies capable of facing a crisis that has led thousands of enterprises to shut down their activities. Therefore, the selectivity promoted by local power and led by CMTU during the pandemic cannot be understood only as a punctual phenomenon, but as an expression of a relationship of historical and situational forces that has resulted and is reproduced by several factors in the last decade. Among them, we highlight the dismantling and crisis of the pre-pandemic selective collection sector, marked by privatization plans, conflicts and disarticulation between cooperatives and the chronic lack of planning; the lack of effective collective participation channels; the shielding of waste management policy and its institutional insulation to privilege a limited number of economic, political, and bureaucratic interests; and the political-partisan alignment of the City Hall (Progressives) and the state government (Social Democratic Party) with the support base of the far-right federal government, which has been systematically treating the pandemic in a negationist manner and minimizing the severity of COVID-19.

Those and other aspects constitute a possible and dynamic context of management and reproduction of cumulative injustices. The positioning of the municipal government at the beginning of the pandemic crisis revived and exacerbated the mechanisms operating in the production of environmental injustice (Acsehrad, 2004), that is, in the imposition on vulnerable social and racial groups that, despite providing essential service, take a disproportionate share of the negative envi-



ronmental consequences of the pandemic. The case reported portrays and encourages us to think and act in a context in which market forces and discriminatory practices of government agencies can deliberately and articulately compete to naturalize the exponentiation of vulnerability and suffering. In this sense, the selectivity of public policies directly contributes to transforming the activities and spaces of recycling into legitimate “sacrificial zones”, places where multiple environmentally aggressive practices affect low-income populations or ethnic minorities with low capacity for political pressure, mobilization, and resistance (De Oliveira, Mello & Peixoto, 2017; Viegas, 2015).

## 5 CONCLUSION

This study aimed to understand the operation of the state selectivity of the Municipality of Londrina regarding the sector of recycling cooperatives during the COVID-19 pandemic in the city of Londrina. The study made it possible to analyze the existence of the concept of selectivity of the State, from a set of interests and actors involved in the state apparatus at a time of major health crisis. As elsewhere, the pandemic has had important impacts on waste collection services, highlighting the importance of the sector for public health and the safety of its workers, especially the most vulnerable, the recyclable waste pickers and processors. As the case of Londrina illustrates, recycling cooperatives, in a relatively different way, faced several negative impacts on their operations and economic performance, considerably increasing their degree of risk, fear, and struggle.

However, unlike other municipalities, no specific program for the waste sector in the pandemic scenario was formulated by the local government. Among specific, indirect, and insufficient actions, the government was more effective in resisting requests and recommendations from cooperatives, CONSEMA, specialists, and the Public Prosecutor’s Office to develop policies consistent with the extraordinary and uncertain moment. Even in the face of a global pandemic, no emergency policy for the sector was undertaken, highlighting inaction as a general strategy of the local government to resist the recognition of vulnerabilities and rights. Thus, in a pandemic context, it directly contributes to the exponentiation of those vulnerabilities and the exacerbation of historical inequalities.

As we seek to demonstrate, the systematic negligence of the City Hall and the CMTU was made possible by the operation of several and combined selectivity mechanisms (structure, ideology, processes, and coercion). Although the pandemic holds us to more immediate issues, a better understanding of such an operation leads us to conditions and relationships that transcend this moment, the city, and the structure of the State. Only in this way is it possible to try to combine, for example, the pre-pandemic crisis of the recycling sector, privatization plans, state centralization in waste management, conservatism, social authoritarianism, and the structural inequality of Brazilian society, as well as the disadvantaged and precarious position of waste pickers in the capitalist recycling chain.

As we try to show, by intensifying the struggle for resources between various interests and social powers, crises such as the COVID-19 pandemic create unique opportunities to unscrew and denaturalize strategic and selective discourses and practices, their contradictions, and implications. At the same time, it has the potential to change the relations of forces that constitute the State and society to rebuild public policies that, instead of covering up and naturalizing, consider and combat environmental injustice and the transformation of the selective collection into areas of more sacrifice in the pandemic. The selectivity promoted by the State during the pandemic aggravated the crisis that was already developing locally in the sector. Although cooperatives have been affected in different ways, selectivity contributes in general to the greater dismantling of the sector, and may even lead to the unfeasibility of some cooperatives. In this sense, it is important to follow the developments of the policy described for the sector, considering its possible strategic character to enable the privatization of waste collection in the city.



The recognition of the essentiality of the waste collection activity and respect for the dignity and rights of its workers require some emergency actions such as assistance in the immediate supply of PPEs; regular food and income assistance to members; systematic testing for COVID-19 and priority in the vaccination plan of the members of cooperatives and waste pickers; economic support for the creation of new temporary physical locations for transshipment and quarantine of materials; creation of specific credit lines for cooperatives and review of possible fines imposed due to the effects of the pandemic. The greater understanding and confrontation of the selectivity and injustices described requiring an urgent institutional reform of the city's waste management system, with the creation of public spaces for discussion/deliberation/coordination, involving multiple public/private/cooperative agents, systematic participatory evaluation instruments, and advertising of actions.

## REFERENCES

- Associação Brasileira de Engenharia Sanitária e Ambiental - ABES (2020). **O Impacto da Pandemia pela Covid-19 na Gestão dos Resíduos Sólidos Urbanos Situação das Capitais Brasileiras**. Recuperado em 22 Agosto, 2020, de : <http://abes-dn.org.br/wp-content/uploads/2020/08/Pesquisa-ABES-2.1-Pandemia-COVID-19-RSU-Capitais-26.8.2020-2.pdf>. Acesso em 22 set. 2020.
- Acselrad, H. (2004). **Justiça ambiental: ação coletiva e estratégias argumentativas** . (Cap. 5, pp. 131-168). Rio de Janeiro: Relume Dumará.
- Aligleri, L.; Borinelli, B.; Santos, L. M. L. (2020). **Economía social y solidaria en la educación: un espacio para la innovación**. (Cap. 7, pp. 192-227). Bogotá: Universidad Cooperativa de Colombia.
- Aligleri, L.; Borinelli, B.; Santos, L. M. L. (2019, novembro). PNRS e a crise no campo da reciclagem na cidade de Londrina: ameaças de retrocessos para o cooperativismo popular. **Anais do III Simpósio Brasileiro de Desenvolvimento Territorial Sustentável**. Matinhos, PR, Brasil, 3. Disponível: <https://drive.google.com/file/d/1f60qGHcfS1gjqRn7iryu1H8kaoo1BSjQ/view>
- Candido, S. E. A., Soulé, F. V., & Sacomano Neto, M. (2019). The emergence of “solidarity recycling” in Brazil: structural convergences and strategic actions in interconnected fields. **Organization & Environment**, 32(3), 363-385.
- Carvalho, J. M. De. (2001). **Cidadania no Brasil. O longo caminho**. Rio de Janeiro. Civilização Brasileira.
- Conselho Municipal de Defesa do Meio Ambiente - CONDEMA. **Ata ordinária Condema 25/06/2020**. Recuperado em 23 dezembro,2020, de: [https://smma.pontagrossa.pr.gov.br/download/condema/2020/Ata\\_2020-06-25.pdf](https://smma.pontagrossa.pr.gov.br/download/condema/2020/Ata_2020-06-25.pdf)
- Companhia Municipal de Trânsito e Urbanização de Londrina - CMTU (2020). **CMTU orienta sobre o descarte adequado de máscaras e luvas CMTU**. Recuperado em 19 de maio, 2020, de <https://cmtu.londrina.pr.gov.br/index.php/ult-noticias/1711-cmtu-orienta-sobre-o-descarte-adequado-de-mascaras-e-luvas.html>
- Conselho Municipal do Meio Ambiente - CONSEMMA Ata da segunda reunião extraordinária do ano de 2020. (2020) **Conselho Municipal do Meio Ambiente**. Recuperado em 25 de agosto, 2020, de <https://www.londrina.pr.gov.br/atas-consema>.





- Companhia Municipal de Trânsito e Urbanização de Londrina - CMTU. **Produção e Custos da Coleta do lixo.** (2019). Recuperado em 23 de Junho, 2020, de [http://cmtu.londrina.pr.gov.br/images/Planilhas\\_estat%C3%ADsticas/2019/Setembro/Produ%C3%A7%C3%A3o\\_e\\_Custo\\_Coleta\\_do\\_LIXO\\_Kurica\\_2014-7.2019.pdf](http://cmtu.londrina.pr.gov.br/images/Planilhas_estat%C3%ADsticas/2019/Setembro/Produ%C3%A7%C3%A3o_e_Custo_Coleta_do_LIXO_Kurica_2014-7.2019.pdf).
- Dagnino, R. D. S., & Johansen, I. C. (2017). **Os catadores no Brasil: características demográficas e socioeconômicas dos coletores de material reciclável, classificadores de resíduos e varredores a partir do censo demográfico de 2010.** Instituto de Pesquisa Social Aplicada. Disponível em: [http://repositorio.ipea.gov.br/bitstream/11058/7819/1/bmt\\_62\\_catadores.pdf](http://repositorio.ipea.gov.br/bitstream/11058/7819/1/bmt_62_catadores.pdf).
- De Oliveira<sup>1</sup>, S. A., de Mello, E. V., & de Peixoto, O. M. N. (2017). Zonas de sacrifício e (in) justiça ambiental: construção de espaços marginalizados em Volta Redonda (RJ). **Anais da Associação Nacional de Pós-Graduação e Pesquisa em Ambiente e Sociedade - ANPPA.** Natal, RN, Brasil.
- Decreto nº 28.149, de 21 de maio de 2020.** Estabelece medidas para a retomada da execução do Programa de Coleta Seletiva de Resíduos Recicláveis domiciliares porta a porta, nos termos do § 7º do art. 5º do Decreto nº 28.055, de 20 de abril de 2020. Foz do Iguaçu, Pr.
- Decreto Municipal Nº 829** (2009). Institui o Comitê Municipal da Coleta Seletiva de Lixo e dá outras providências. Londrina, Pr.
- Decreto Federal Nº 7.404** (2010). Regulamenta a Lei no 12.305, de 2 de agosto de 2010, que institui a Política Nacional de Resíduos Sólidos, cria o Comitê Interministerial da Política Nacional de Resíduos Sólidos e o Comitê Orientador para a Implantação dos Sistemas de Logística Reversa, e dá outras providências. Brasil, BR.
- Dias, S; Abussafy, R; Gonçalves, J & Martins, J. (2020). **Impactos da pandemia de Covid-19 sobre reciclagem inclusiva no Brasil.** Women in Informal Employment: Globalizing and Organizing. Disponível em: [https://www.wiego.org/sites/default/files/publications/file/Impacts%20of%20the%20COVID19%20Pandemic%20on%20Inclusive%20Recycling%20in%20Brazil%20Portuguese%20for%20web\\_1.pdf](https://www.wiego.org/sites/default/files/publications/file/Impacts%20of%20the%20COVID19%20Pandemic%20on%20Inclusive%20Recycling%20in%20Brazil%20Portuguese%20for%20web_1.pdf).
- Fergutz, O., Dias, S., & Mitlin, D. (2011). Developing urban waste management in Brazil with waste picker organizations. **Environment and Urbanization**, 23(2), 597-608.
- Folha de Londrina. (2020). Coronavírus: desafios na rotina da coleta de lixo em Londrina. **Folha de Londrina**, Recuperado em 25 de março, 2020, de <https://www.folhadelondrina.com.br/cidades/coronavirus-desafios-na-rotina-da-coleta-de-lixo-em-londrina-2984067e.html>.
- IBGE - Instituto Brasileiro de Geografia e Estatística (2018). **Cidades e estados:** Londrina. Recuperado de <https://cidades.ibge.gov.br/brasil/pr/londrina/panorama>.
- Jessop, B. (2016). **The State. Past, Present and Future.** Cambridge: Polity.
- Jessop, B. (2007). O Estado e a construção de Estados. **Outubro**, (15), 11-43.
- Jessop, B. (2002). **The future of the capitalist state.** Polity, Cambridge.
- Lei nº 12.305, de 02 Agosto de 2010 (2010). Constitui a Política Nacional de Resíduos Sólidos; altera a Lei no 9.605, de 12 de fevereiro de 1998; e dá outras providências.



- Ministério Público do Estado do Paraná - (20ª promotoria de justiça da comarca de Londrina). (2020). **Recomendação Administrativa Nº 02/2020**. Recuperado em 31 julho, 2020, de <http://meioambiente.mppr.mp.br/arquivos/File/22.pdf>
- Ministério Público do Estado do Paraná - (Grupo de Atuação Especializada em Meio Ambiente, Habitação e Urbanismo (GAEMA) Regional de Campo Mourão). (2020). **Recomendação Administrativa Nº 01/2020**. Recuperado em 31 julho, 2020, de <http://meioambiente.mppr.mp.br/arquivos/File/23.pdf>. Acesso em: 31 jul. 2020
- Ministério Público do Estado do Paraná. (2020) **Recomendação Administrativa Nº 01/2020. Recuperado em 31 julho, 2020**, de [https://comunicacao.mppr.mp.br/arquivos/File/ASCOM/Recomendacao\\_Administrativa\\_01\\_2020\\_Estado\\_PR\\_Apoio\\_Coop\\_Catadores\\_COVID19\\_assinado.pdf](https://comunicacao.mppr.mp.br/arquivos/File/ASCOM/Recomendacao_Administrativa_01_2020_Estado_PR_Apoio_Coop_Catadores_COVID19_assinado.pdf)
- Ministério do Meio Ambiente. (2020). Recuperado em 15 julho de 2020 de <https://www.mma.gov.br/>>
- Offe, C. (1984). **Problemas estruturais do Estado capitalista** (pp. 122-137). Rio de Janeiro: Tempo Brasileiro.
- Pereira, B. C. J. O., & Goes, F. L. O. (2016). **Catadores de materiais recicláveis: um encontro nacional**. Instituto de Pesquisa Econômica Aplicada (Ipea). Disponível em:
- Pugliesi, E.; Santiago, C.D. & Leite, W.C de (2020). **Gestão de resíduos sólidos e a pandemia COVID 19: (des) preparo para o enfrentamento da crise. Respostas dos municípios para garantir segurança alimentar e nutricional em tempo de pandemia**. (Cap. 9, pp. 135-147). São Carlos: Comissão Permanente de Publicações Oficiais e Institucionais - CPOI.
- Poulantzas, N. (1979). **State, Power, Socialismo**. Londron
- Prefeitura Municipal de Londrina (2020). **Secretaria SEMA**. Recuperado em 15 de junho, 2020 de [http://www1.londrina.pr.gov.br/index.php?option=com\\_content&view=frontpageplus&Itemid=1018](http://www1.londrina.pr.gov.br/index.php?option=com_content&view=frontpageplus&Itemid=1018)>.
- Prefeitura Municipal de Curitiba. (2020). **Protocolo para procedimentos especiais na gestão de resíduos sólidos urbanos no município de Curitiba, para prevenção do coronavírus**. Recuperado em 09 de julho de <https://mid.curitiba.pr.gov.br/2020/00297198.pdf>.
- SNIS.(2019). **17º Diagnóstico do manejo de resíduos sólidos urbanos**. Sistema Nacional de Informações sobre Saneamento. Ministério do Desenvolvimento Regional: Secretaria Nacional de Saneamento. Brasília, Disponível em: <http://www.snis.gov.br/diagnostico-anual-residuos-solidos/diagnostico-do-manejo-de-residuos-solidos-urbanos-2018>. Acesso em: set., 2020.
- Souza, G. F.; Muto, E. Y.; Nascimento, F. P.; Gouveia, N.(2012). Prevalência de doenças respiratórias e diarreia em catadores de material reciclável. **Epidemiologia e Serviços de Saude**, 29 (3), 1-12.
- Souza, M. T. S; Paula, M. B.; Souza-Pinto, H. (2012). O papel das cooperativas de reciclagem nos canais reversos pós-consumo. **Revista de Administração de Empresa – RAE**, 2 (52), 246-262.
- Van Doremalen, N; Bushmaker, T; Morris. D. H; Holbrook, M. G; Gamble, A. Williamson, B. N; Munster, V. J. Aerosol and surface stability of SARS-CoV-2 as Compared with SARS-CoV-1 (2020). **The New England Journal of Medicine, Massachusetts Medical Society**, v. 382, n. 16, Apr. 16, p. 1564-1567. Disponível em: <https://www.nejm.org/doi/full/10.1056/NEJMc2004973>. Acesso em: 14 mar. 2020.



Viegas, N. R. (2015). **Desigualdade ambiental e “zonas de sacrifício”**. Disponível em <[https://www.faneesp.edu.br/site/documentos/desigualdade\\_ambiental\\_zonas\\_sacrificio.pdf](https://www.faneesp.edu.br/site/documentos/desigualdade_ambiental_zonas_sacrificio.pdf)>. Acesso em 30 jan. 2021.

Ziglio, L. (2020). COVID-19 e catadores de materiais recicláveis no município de São Paulo: instrumentos de gestão. In: Ribeiro, W, C. (org.). **COVID-19: passado, presente e futuro**. Ffich - Usp, (Cap. 10. pp. 185-194) São Paulo.

## AUTHORS

### 1. Felipe Nepomuceno Coimbra Santos

Universidade Estadual de Londrina – UEL. Londrina, Paraná, Brazil.

Master’s student in Administration – PPGA

ORCID: <https://orcid.org/0000-0001-6359-2523>

E-mail: [felipencoimbra@gmail.com](mailto:felipencoimbra@gmail.com)

### 2. Benilson Borinelli

Universidade Estadual de Londrina – UEL. Londrina, Paraná, Brazil.

Doctor in Social Sciences from the State University of Campinas; Post-Doctoral Student in Human Geography – University of São Paulo - USP

ORCID: <http://orcid.org/0000-0002-7256-7618>

E-mail: [benilson@uel.br](mailto:benilson@uel.br)

### 3. Caroline Nayara Marilac Flor

Universidade Estadual de Londrina – UEL. Londrina, Paraná, Brazil.

Master’s student in Administration – PPGA

ORCID: <https://orcid.org/0000-0001-5817-1206>

E-mail: [carolinemariflor@gmail.com](mailto:carolinemariflor@gmail.com)

### 4. Lilian Aligleri

Universidade Estadual de Londrina – UEL. Londrina, Paraná, Brazil.

Doctor of Administration from the Faculty of Economics, Administration and Accounting at University of São Paulo.

ORCID: <https://orcid.org/0000-0002-3039-2645>

E-mail: [lilian.aligleri@uel.br](mailto:lilian.aligleri@uel.br)



### Contribution of authors

Contribution	Author 1	Author 2	Author 3	Author 4
Definition of research problem	√	√	√	
Development of hypotheses or research questions (empirical studies)	√	√	√	
Development of theoretical propositions (theoretical work)	√	√	√	√
Theoretical foundation / Literature review	√	√	√	
Definition of methodological procedures	√	√		
Data collection	√		√	
Statistical analysis	√		√	
Analysis and interpretation of data	√	√	√	
Critical revision of the manuscript	√	√	√	√
Manuscript writing	√	√		√
Other (please specify)	√	√		√

### **Conflict of Interest**

*The authors have stated that there is no conflict of interest.*

### **Copyrights**

*ReA/UFSM owns the copyright to this content.*

### **Plagiarism Check**

*The ReA/UFSM maintains the practice of submitting all documents approved for publication to the plagiarism check, using specific tools, e.g.: CopySpider.*

