



Neighborhood Impact Assessment an urban sustainability instrument: analysis in medium-sized cities in São Paulo, Brazil.

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Abstract

The Neighborhood Impact Assessment (NIA) ¹ is an important instrument of the Brazilian Urban Policy enacted in the City Statute, Federal Law 10.257/2001. Considered by the national academic literature as a relevant instrument for local urban environmental management. However, in Brazil, the understanding that the environmental and the urban are part of the same context is not yet a reality within the local public administration sectors, with a deep disconnection of management and governance between the urban and environmental departments. The objective of this work was to analyze the application of NIA in medium-sized cities in the state of São Paulo and to evaluate its contribution to the local urban environmental management of these cities. We also intend to evaluate the NIA integration with other sectors of local public management such as the environment, urban mobility, social housing, etc. As a methodology, we used NIA Process Components, verifying the absence or presence in the urban laws of four (04) medium-sized cities in the state of São Paulo. We also interviewed civil servants from the environmental and urban sectors, supplementing information that was absent in laws and official documents. The results reveal that most municipalities do not have a specific law that regulates the NIA, and Master Plans, Land Use and Occupation Law regulate this instrument. Civil servants emphasize the weaknesses and strengths of the instruments. As potentialities of this instrument, they observed public participation, increased state control in environmentally sensitive areas, greater urban-environmental compensation mechanisms, and so on. Weaknesses signalize were: conflicts involving urban land subdivision, interference of the real estate market in the use and occupation of urban land, changes in the Master Plans by the city councilman aiming to meet the interests of private financial capital. The four cities, which are part of the Case Studies, have not yet effectively incorporated elements of climate change in their local governance. Issues related to social housing, expansion of slums, occupation of protected environmental areas by poor populations are still the most urgent priorities in these cities, as well as in many Latin American cities. The improvement and advancement of the articulation of the urban and environmental sectors in Brazilian cities must require thinking about better scientific methodological and governmental improvements.

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Keywords

Neighborhood Impact Assessment; Latin American cities; Medium cities.

¹ Brazilian authors often use the terminology in English "Neighborhood Impact Study". However, we chose to use "Neighborhood Impact Assessment" according to (Abiko & Barreiros, 2014) to facilitate the understanding of the instrument for the international audience, as it has similarities with the Impact Assessment. However, in Brazil, the NIA is known as the "Estudo de Impacto de Vizinhança".

1. Introduction

After a long period of 21 years of a dictatorial regime, the redemocratization of Brazil was mainly marked by the promulgation of the Federal Constitution in 1988 (CF/88). As of CF/88, Brazilian cities acquired a central role in the formulation of territorial policies, especially in the creation of regulatory mechanisms and instruments for planning and controlling Land Use and Occupancy. However, although the decentralization of urban and environmental planning has brought more autonomy and protagonism to cities, these processes are still full of obstacles and gaps that need to be better qualified (Fernandes, 2008)

One aspect to be analyzed is the connection between the action of the Public Power, responsible for the urbanization and regulation of the territory, with the other agents involved in the production of the city, such as business and real estate sectors, contractors, public service concessionaires, developers and construction companies (Rolnik, 2009). Often, market interests, to the detriment of fulfilling the city's social function, mostly drive these connections. These processes have presented new contours related to the commodification and financialization of housing (Harvey, 2007; Klink & Stroher, 2017).

With the approval of the National Urban Policy through Federal Law No. 10,257/2001, known as the City Statute (EC), the socio-environmental dimension was consolidated in Brazilian urban planning. However, the socio-environmental dimension found little support in the instruments instituted by the EC, which are more focused on dealing with real estate speculation. According to Schvarsberg (2011), the urban instruments of this law were created in order to establish the separation between the Right to Build and the Right to Property, guaranteeing the principle of Democratic Management of Cities. Of the instruments presented by the EC, the Neighborhood Impact Assessment (NIA) is the closest to the environmental instruments known in the National Environmental Policy (Federal Law nº 6938/1981) (Peres & Silva, 2013).

The expression "Neighborhood Impact" was created to describe a specific group of environmental, urban, economic, social and urban mobility impacts that occur in urbanized areas and are present in the area of influence of a given enterprise or activity implemented in the urban territory. (Lollo & Röhm, 2005).

In this context, the Neighborhood Impact Assessment (NIA) is used in Brazil to assess the environmental, urban, economic, social and urban mobility impact that the construction or implementation of an enterprise or activity may cause in its neighborhood. It is widely required by the Municipal Government (in Brazil, the municipality/city is the smallest state scale) to authorize the construction and/or operation of these activities. The EC defines that each city must create a local law defining what types of activities need NIA to operate within the urban territory, it is also the role of the Municipal Government to decide the scope of this study and the need, or not, of holding Public Hearings.

Thus, the NIA simultaneously brings together three characteristics that seek to guarantee sustainable, resilient and fair cities: it is a study of a technical nature; it is a conflict mediation instrument; and is a tool to implement Urban Policy objectives at the local level (Schvarsberg, 2016).

In a nutshell, the NIA is a legal instrument of urban management, leaving it up to the municipalities to define the types of projects that must prepare NIA (Inguaggiato et al., 2021). The NIA aims to assess urban socio-environmental impacts, in addition to indicating measures to prevent, correct and mitigate these impacts. Through the assessment of impacts, it is possible to infer the conformity of the implementation of the enterprise or activity in the indicated place, establishing the relationship between the city and the enterprise and the enterprise with the city, considering the neighborhood that is inserted (Rolnik et al., 2005).

In cities where the NIA appears in urban laws, norms and/or regulations, it is requested for the approval of projects and activities with the potential to cause impacts on the urban environment, consisting of a step in the urban licensing procedure. It can also present significant integrations with Environmental Licensing at the local level (LAM). (Abreu & Peres, 2021). The integration of NIA in local environmental management is seen as a way to improve municipal management and the environmental quality of cities (Araújo & Campante, 2017; Peres & Cassiano, 2019).

The understanding of the environment and the urban, as integrated realities is still at the beginning in the management of Brazilian cities. In most of these cities, the regularization processes go through urban planning approval and Environmental Licensing separately and without linkage. The disconnection between the urban and environmental sectors of the same Municipal Government is evident. (Gouvêa, 2021).

The NIA has some similarities with the Neighborhood Sustainability Assessment tools (NSA). NSA tools are designed to facilitate decision-making in the pursuit of sustainable development (Gargiulo et al., 2018; Komeily & Srinivasan, 2015, 2016; Yigitcanlar et al., 2015; Yoon & Park, 2015). In urban and neighborhood contexts, where various entities and forces act to influence decision-making, it is essential to add the institutional dimension to the three pillars of sustainability. In this case, not only the interactions between Non-Governmental Organizations and Governmental Organizations involved in decision making, but the set of regulations, laws and norms that guide these interactions (Sharifi & Murayama, 2013, 2014).

According to Sharifi & Murayama (2013), NSA tools can be divided into two main categories. In the first category are tools derived from construction assessment tools, such as LEED-ND and BREEAM Communities. In the second category are tools that are incorporated into neighborhood scale plans and sustainability initiatives to assess their sustainability performance, such as HQE2R, Ecocity and SCR. The NIA seems to fall into this second category, which can be studied in future research. However, the socio-economic context of the country must be taken into account when carrying out such an analysis. Some authors have already studied how NSA tools are implemented in developing countries, showing that it is possible to apply these tools (Kamble & Bahadure, 2019; Yigitcanlar et al., 2015).

Research aimed at NIA innovation is needed, incorporating new knowledge and sharing good practices learned in other tools. In reality, however, the NIA is still poorly researched in Brazil. (Abreu & Peres, 2021). Although the introduction of the NIA in the EC is more than 20 years old, its consolidation as an instrument of urban and environmental management is still incipient and several authors point out gaps and challenges regarding its applicability by municipal administrations, leaving gaps, lock-ins and legal inconsistencies (Abreu & Peres, 2021; Pilotto et al., 2013). In this context, this paper aims to verify the presence or absence of the NIA process components in the urban legislation of four (04) medium-sized cities in São Paulo, identifying advances and limitations in the legislation and its possible articulation with urban environmental management.

2. Methodology

For the research, we selected four medium-sized cities located in the State of São Paulo. This state was a pioneer in Brazil in the regulation and implementation of the NIA. São Paulo has the highest population concentration in Brazil and its municipalities have heterogeneous urban legislation, according to their territorial and socioeconomic realities.

We chose cities with more than 100 thousand inhabitants because they have greater economic density and have a denser urban space (Bitoun & Miranda, 2009). Considering the analysis of the database of the most current Census of Brazilian Municipalities, carried out by the Brazilian Institute of Geography and Statistics (IBGE) (IBGE, 2019), this range includes municipalities that have had a Master Plan for a longer time and higher percentages of municipalities (> 95%) that have urban and environmental sectors in the Municipal Government.

The analysis of the legislation followed the Methodological Roadmap, adapted from Peres & Cassiano (2019), which defines ten NIA Process Components, which can be considered minimum requirements to be incorporated by municipal jurisdictions, aiming at a better orientation to environmental-urban management for the regulation and application of these instruments.

We analyzed the NIA laws, regulations, rules and documents for each of these cities based on the NIA Process Components. In order to obtain more information about urban environmental management in these cities, we interviewed at least one Public Servant from each Municipal Government. We recorded the interviews and coded them to ensure Public Servant's anonymity. All subjects gave their informed consent for inclusion before participating in the study. The study was conducted in accordance with CNS Resolution No. 510/2016 and with the

approval of the Research Ethics Committee of the Federal University of São Carlos with protocol CAAE No. 55867222.3.0000.5504.

According to Creswell (2009), interviews are considered one of the most important sources of information for a Case Study, as they allow a more detailed record of particular points of view about a phenomenon. The type of interview selected for this research was the semi-structured focal interview, in which the interviews are spontaneous, but follow a set of questions, conducted by a semi-structured interview script (Tab.1).

Table 1 - Semi-structured interview questions.

Questions
What is the role of the Neighborhood Impact Assessment (NIA) in municipal urban management?
What gaps and lock-ins have been experienced by the municipal urban and environmental planning agency?
Is there a consultative or deliberative council or collegiate body dealing with urban issues in the municipality?
(If the answer to the previous question is YES) Does this council have any influence on the decision making for the approval of projects that go through the NIA process?
Can you identify conflicts between urban policy and environmental policy in the municipal territory?

Conducting interviews helped in the analysis of the rationale of the normative panorama of creation and execution of the NIA and on the technical-administrative procedures for approving projects that cause urban, environmental, social and economic impacts in the selected municipalities.

3. Results and Discussion

The most recent Census of Brazilian Municipalities indicate a gradual growth in the number of municipalities that presented the NIA in a specific law or as an instrument of their Master Plans, approximately 40% of all Brazilian municipalities. When taking into account the population size, it was observed that, in those with more than 100 thousand inhabitants, the regulation of the NIA was present in about 90% of the population (IBGE, 2016, 2019).

The lack of regulation of the NIA by the municipalities is one of the main obstacles to its implementation, although difficulties persist for those who have regulation. The frequent postponement of the regulation of municipal urban policy instruments, as well as the lack of physical structure and human resources, are considered important obstacles to the achievement of its objectives (Araújo & Campante, 2017).

Figure 1 presents the analysis of the verification of Absence, Partial Presence or Presence in current municipal legislation, according to the methodology proposed by Peres & Cassiano (2019). Those who answered up to 25% of the process components presented in the methodology, Partial Presence from 26% to 75% and Presence above 76% were considered as Absence.

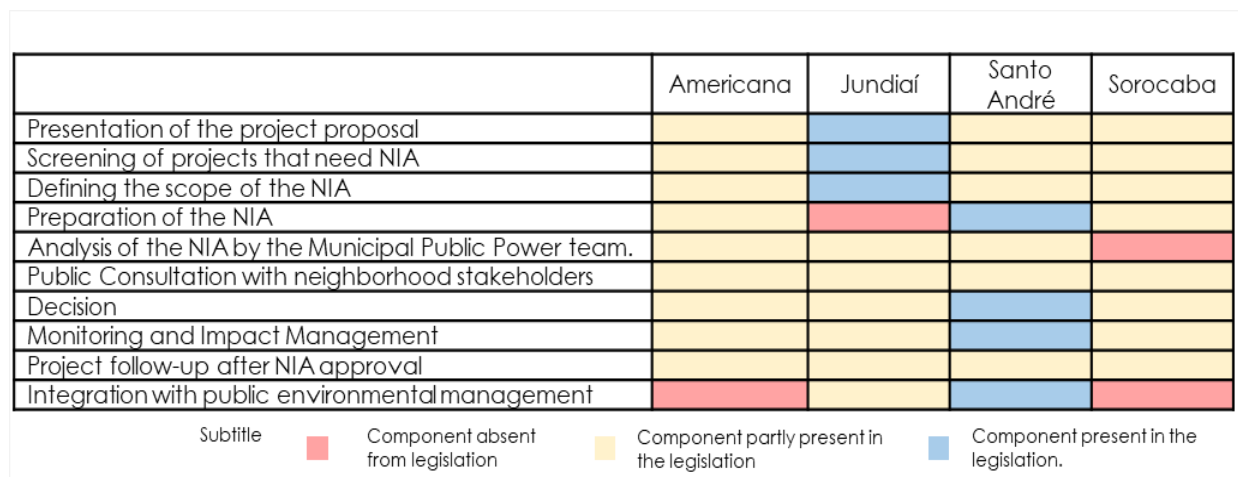


Figure 1 - Synthesis of the analysis of the NIA regulation, considering the Methodological Roadmap of Process Components. Source: Adapted from Peres & Cassiano (2019)

The Sorocaba legislation does not have half of the NIA Process Components analyzed, while the other half was presented in a Partly Present form. Jundiaí and Santo André have some categories present. Americana Partly met most components. This, however, does not indicate whether the instrument is fully functioning in municipal urban management.

3.1. Presentation of the project proposal

Jundiaí provided more information and instructions to the technical managers on how to start the NIA approval process. The municipality also has a geographic database called GeoJundiaí, where information about the NIA can be consulted and viewed by zone/neighborhood. Americana also has a similar system, but with less information. Another good practice verified was the availability of project approval flowcharts, since it is a way to present in an integral and synthetic way the procedures of the process, facilitating the understanding of the steps to be overcome and which sectors are responsible (Peres & Cassiano, 2019). All cities except Americana have flowcharts showing all steps for NIA approval. The easy access and clarity of information on the elaboration of the NIA prevents possible ambiguities in its elaboration (Inguaggiato et al., 2021).

3.2. Screening of projects that need NIA

Regarding the screening stage, the presentation of typologies subject to NIA is present in all municipalities. The use of lists with cut-off criteria can be problematic due to the relative degree of arbitrariness with which they are defined. This methodology possibly originates from the field of Environmental Impact Assessment (EIA), where it is common to have both positive lists (with the enterprises and activities that require EIA), and negative lists (which do not require EIA). They end up being simple and quick to use approaches, however, they are targets of criticism as their inherently arbitrary approaches and that, many times, do not capture all the information of the context of that enterprise or activity (Rocha & Fonseca, 2017).

This methodology must, therefore, be complemented with rules that include unforeseen cases that may be considered by the urban and environmental planning agency as potentially impacting, in addition to clear and defined procedures for the analysis of cases not covered by the law. The incorporation of discretionary power in the municipal executive is important for the definition of rules and negotiation of exceptions. Covering all cases that have a significant impact, even if they do not appear in the typologies lists. In Americana, the Master Plan defines what low, medium and high impact is. All high-impact activities and enterprises are eligible for NIA. Santo André is the only city that has different types of NIA according to the degree of impact of the enterprise/activity, with Type 1 being Simplified and Type 3 more complex, the latter with analysis and approval subject to consideration by the Municipal Council for Urban Policy.

3.2. Defining the scope of the NIA

All municipalities presented criteria to determine the scope of the NIA: definition of the areas of influence, indication of the main items that the NIA must contain, in addition to the components, aspects and impacts that must be analyzed, considering the issues listed in the City Statute. The use of the same criteria as the Statute shows the influence of the law on the legal structure adopted by the municipalities. However, the simple copy of the questions and instruments of the federal law, both by the specific laws and by the master plans, can evidence the lack of knowledge about the reality of the municipality itself.

The availability of the Term of Reference (TR) by the urban planning agency was found only in Jundiaí and Sorocaba. It is important that the regulation provides for both the preparation and the supply of TRs, with a detailed definition of the scope and guidance for the preparation of the studies, including the characterization of the impact assessment methods, criteria and parameters to be used (Araújo & Campante, 2017).

Regarding the definition of neighborhood areas, municipal legislation varies. Jundiaí differentiates “Area of Direct Influence” and “Area of Indirect Influence” of the enterprises or activities, concepts brought from the Environmental Impact Assessment (Sánchez, 2020). In Santo André, the Land Use and Occupancy Law uses the concepts of “Mediate Neighborhood”, for those installed in lots and blocks that border the activity lot. And

"Immediate Neighborhood", the one located in the project's area of influence and that can be reached by it, covering at least a radius of 500.00 m (five hundred meters) counted from the limits of the lots. Sorocaba determines that the type of enterprise or activity under analysis will determine the neighborhood. Americana does not provide this information. The definition of the concept of neighborhood was one of the points addressed by Polizel (2018) that deserve to be improved in the regulation of the NIA.

3.3. Preparation of the NIA

As for the elaboration of the NIA, the legislation of Americana, Santo André and Sorocaba requires a multidisciplinary team, the first two cities require that professionals have specific training, qualified and registered by the city hall. Jundiaí legislation did not provide information on those responsible for preparing the NIA. The establishment of responsibility for the elaboration of the NIA is often absent in the legislation that regulates the instrument and, according to Polizel (2018), only 30% of the fifty most populous cities in Brazil had such determination.

Public servants of urban planning agencies in cities in the Metropolitan Region of Belo Horizonte (Minas Gerais, Brazil), widely criticize the low quality of the NIA presented by the entrepreneurs (Merícia, 2018). According to the author, NIAs have a large volume of pages, but are technically inconsistent and prepared by teams that appear to meet the specific interests of the contracting entrepreneur. Araújo & Campante (2017) highlight the importance of studies being carried out by interdisciplinary teams with training and specific technical practice to assess impacts in the urban environment.

The legislation of Americana, Santo André and Sorocaba determines the elaboration of a Report with the information of the NIA presented in an objective way and in accessible language so that the population of the neighborhood can understand. The legislation of Sorocaba determines that the information be reproduced in accessible language and illustrated by maps, pictures, photos and other visual resources so that the population can understand the advantages and disadvantages of the project, as well as all the consequences of its implementation and operation.

3.4. Analysis of the NIA by the Municipal Public Power team

All municipalities provide little detail on the NIA review process. In Jundiaí, a Technical Group of professionals from different departments carries out the analysis. However, there is no participation of municipal councils at this stage. In Santo André, the Municipal Council of Urban Policy has a significant participation in the analysis of the NIA. Municipal councils are important instruments of social participation, being composed, when constituted on a par, by representatives of Non-Governmental Organizations, universities, organized civil society, business and city hall technicians. The analysis and/or decision by several stakeholders can make the decision fairer and prevent the appropriation of such spaces by the local elite.

Americana, Jundiaí and Santo André indicate the agency responsible for analyzing the NIA and in which other agencies the process will proceed. Santo André presents a detailed flowchart of the working hours in the various departments. According to Araújo & Campante (2017), it is essential to regulate consultation procedures with sectoral bodies and essential that analyzes are carried out in an integrated manner:

(...) the most successful experiences being those related to the formation of intersectoral commissions with the participation of the various secretariats and concessionaires, working in a shared way, from the initial stages of formulating the terms of reference and defining the scope of the studies that will be required.

The experience of bringing together a Santo André Multidisciplinary Technical Group is consistent with the quote by Araújo & Campante (2017). Interviewee 01 highlighted the relevance of the analysis of the NIA involving representatives of various bodies in the municipality of Santo André. The lack of articulation and eventual changes in the competences of urban planning agencies is often one of the main reasons for the increase in bureaucracy and for the loss of efficiency in the project approval processes.

3.5. Public Consultation with neighborhood stakeholders

The EC presupposes a society of active citizens, organized and informed about their interests, whose involvement with urban issues is a way of providing social justice. It also establishes that the Municipal Public Power is not the only one responsible for the execution of urbanization projects, nor the main producer of space, so that urbanization requires cooperation between society, private initiative and government sectors, incorporating the population in these decision-making processes (Bechelli, 2011; Caldeira & Holston, 2015)

Participatory planning and management, however, are still recent themes in Brazilian legislation, especially when considering the still recent military dictatorship, the promulgation of the Federal Constitution of 1988 and the City Statute itself. In this way, the stage of public participation ends up being neglected to the detriment of the participation of professionals directly linked to the production of the city, such as architects, engineers, representatives of the real estate market, etc. The segments that represent the interests of communities end up participating only in certain historical moments, as verified by (Moura, 2009) in the city of Curitiba (Paraná, Brazil), considered a model in urban planning, as “an exclusion that is confirmed in the inexistence of democratic channels of participation, or the fragility of the few instituted councils”.

The city of Sorocaba is the only one to present, as a condition for approval of the NIA, the consent of the population: Neighborhood consent must be proven through the agreement of more than 50% of residents within a radius of 300m from the site. Perception surveys with the population have the potential to extract both quantitative data, such as the magnitude of impacts, and qualitative, regarding the aspects to be impacted with the installation and/or operation of the project.

A incorporação dos debates e disputas realizados durante as audiências públicas é uma forma do poder público ouvir, da comunidade afetada, impactos que influenciam a vizinhança e que, entretanto, não foram apreciados na elaboração do NIA. Apenas Jundiaí prevê a inclusão das discussões realizadas nas audiências ao processo de análise do NIA. Um dos objetivos essenciais do NIA é fornecer segurança à comunidade vizinha, informando sobre os efeitos positivos e negativos do empreendimento. É, portanto, um instrumento de justiça social que deve ser tanto elaborado como analisado de forma imparcial, promovendo a devida publicidade e garantindo o direito de participação dos interessados. Os espaços de debate do NIA, tanto nas audiências quanto nas consultas públicas, como no caso de Sorocaba, podem impulsionar as discussões para além de um empreendimento específico, promovendo a produção da cidade de forma participativa e integrada à gestão ambiental municipal (PERES; CASSIANO, 2019). Todavia, conforme observado por (Araújo et al., 2019):

(...) Even in cities that have been structuring themselves to apply the NIA in a more systematic and effective way, it is the lack of mechanisms for popular participation that, together with the absence of collegiate deliberation bodies, make urban licensing processes more vulnerable to articulations and political fluctuations of each management.

The Municipal Government, through the regulation of the NIA, must enable the process of public participation in all stages of project approval, effecting its action in decision-making spaces, consolidating the ideal of participatory democracy established by the CF/88 and the EC (MERÍCIA, 2018). The involvement of different stakeholders in all phases of the NIA, as well as in the NSA tools and AIA, validates the authenticity and functioning of the systems (Kamble & Bahadure, 2019).

3.6. Decision

In Jundiaí and Santo André, decision-making is the responsibility of the managers after issuing an opinion by the multidisciplinary technical group. In Santo André, the Municipal Council for Urban Policy subsidizes the final decision on whether or not to approve a Type 3 NIA. In the city of Sorocaba, the Municipal Planning Council participates in the analysis and approval of the NIA. In Jundiaí, the legislation does not provide for the participation of municipal councils in decision-making. It is essential to create deliberative collegiate councils representing the public power and organized civil society for the issuance of urban and environmental licenses (ARAÚJO; CAMPANTE, 2017).

Whether the decision is made by an authority (only the manager of the urban planning agency), or a decision made by the municipal council, clarity of the criteria for formulating and justifying decision-making is essential. The prediction of the participation of municipal councils in the decision phase on the NIA gains importance according to the feasibility of including management measures that serve the affected communities (PERES; CASSIANO, 2019). The use of georeferenced databases updated with information on licensing processes, closed or in progress, as an important tool to support decision-making, both in the scope of the assessment of local cumulative impacts and within a context of metropolitan planning.

3.7. Monitoring and Impact Management

Santo André is the only one that answered all questions related to the monitoring and management of impacts. All municipalities require the entrepreneur or person responsible for preparing the NIA to sign a Term of Commitment, formalizing the commitment to comply with mitigating and/or compensatory measures. The approval of the NIA and the respective license/authorization to build or operate, per se, should already guarantee compliance with those mitigating and/or compensatory measures, in accordance with the law. The signing of a "contract" formalizing this commitment shows that the law is often not complied with. The Public Servant seeks, with the signing of the Term of Commitment, to reaffirm the legal obligations of the entrepreneur. Santo André and Sorocaba are the only ones that have implemented monitoring measures with definition of costs, actions and schedules.

The details of monitoring actions or programs and impact management measures only appear in the legislation of Santo André and Sorocaba. Both provide for the development of a follow-up and monitoring program for impacts, indicating factors and parameters to be adopted during all phases of the enterprise or activity. In the cities of Americana, Jundiaí and Santo André, there is an obligation, on the part of the technical responsible, to indicate deadlines, schedules and costs of the monitoring stages.

According to (Marques & Silva, 2015), mitigating measures are important interventions to mitigate the impacts caused by the enterprise or activity, however, they are the counterparts that have the potential to improve the public space where the project is planned. In this regard, Interviewee 02, when asked about the possibilities of improving the NIA in Santo André, reinforces the importance of these compensations and points out as one of the aspects that need improvements in municipal legislation:

So, for example, I will mention the issues of compensation in public facilities. It is somewhat difficult to quantify these impacts depending on the enterprise, right? So we have... We've already tested some formulas, right? And I think there is still a field of improvement for us to – let's say – evolve in this regard.

Interviewee 03 cites how the department has adapted itself when asking for compensation in projects that require less demands on public facilities:

So I will cite, for example, a project that, according to the calculation of the Department of Education, would generate a demand for three places within a day care center. There is no day care for just three children: the city hall has a standard day care module that is for a minimum of 120 children and the most common standard would be for 240 children. So either you order a whole outfit or you don't order anything? So we transformed this demand into a value, a value in money. And this amount is paid by the entrepreneur and he goes to the Municipal Urban Development Fund, and this resource is transferred to the Department of Education, for example. In addition, the Department uses this resource to reinforce the daycare she has closest, anyway. So this, for example, is a way that was found to give an answer. Because at the beginning, you couldn't do anything, if you didn't justify the construction of a complete equipment - which is the majority of cases -, or you demanded the construction of a complete equipment - which, depending on the case, would be excessive, right? So we still have it, we struggle a little with it, but we have been working more or less along this line

Project follow-up after NIA approval

The monitoring stage provides for which body is responsible for inspection and which mechanisms will be used to ensure compliance with the commitments assumed by the person in charge. Compliance with the implementation of mitigating and/or compensatory measures must be monitored through an inspection carried out by the licensing

body, preferably consolidated through a monitoring report from the NIA (SCHVARBERG et al., 2016). All cities, however, have little information related to post-approval follow-up.

Only the city of Jundiaí determines which teams are responsible for carrying out the follow-up after the approval of the NIA. The forecast of follow-up inspections was found only in the legislation of Sorocaba. It is observed that in many municipalities, after the approval of the NIA, impact mitigation actions are no longer monitored and end up being disregarded and abandoned over time.

4. Final Considerations

The regulation of the NIA in the four cities showed differences in the way the instrument is applied by the Municipal Government. Most do not have a specific NIA law, those that existed previously were revoked by the respective Master Plans with a forecast of future regulation. The existence of NIA legislation does not imply the quality of the instrument and its application by the Municipal Government. However, the absence of clear legislation can be an obstacle to the application of municipal Urban Policy, especially when related to licensing and inspection processes.

The participation of neighborhood communities in the four cities requires structures that guarantee the Right to the City in ways that are more efficient. This could occur through public consultation prior to the elaboration of the NIA, in Public Hearings and/or in the dissemination of monitoring reports of the projects already installed. It is impossible to achieve urban sustainability without strong investment and prioritization of social development.

The mechanisms of integration with the local Environmental Licensing are not clear. There are mentions of environmental instruments in urban legislation, especially in the Master Plans, but the processes do not seem to dialogue. This point deserves a deeper investigation, which will be carried out in future stages of this research. In Brazil, environmental planning and management generally operate in different government departments, with different political or legal interests and structures. Which is no different in these four cities. There are still growing conflicts between the green agenda, the brown agenda and environmental justice issues. Urban planning is potentially at the intersection of these conflicts. For the issue of urban sustainability to gain relevance, it is necessary to build an agenda that is social and political, a single and comprehensive matrix for understanding the issue. Although the discourse of environmental protection and sustainability is present in the speech of many managers who work in the planning of cities, the environmental issue reveals itself as a continuous frontier of clashes and tensions still.

In addition to the historic division between the environment and urban environments in Brazil, the situation has worsened. This is because successive neoliberal federal governments have year after year dismantling the Brazilian Environmental Policy and Urban Policy. An example is the recently approved Federal Law n° 13.874/2019, known as the Economic Freedom Law. This law provides that no abusive compensatory or mitigating measure or provision should be required, without the need for impact studies or other releases of economic activity in urban law. This law weakens the Urban Policy system, as it deprives cities of their ability to demand compensation in licensing processes. The law mainly interferes in the application of the NIA and, in general, in the execution of the Urban Licensing. These national policies play a crucial factor in guiding the formulation of urban sustainability.

Faced with the systematic dismantling of the legal-urban-environmental order, perhaps one of the main obstacles is the clash between groups that build a city of the market and financial capital and between groups that seek a city for the public good and that seek to meet the social functions recommended in the City Statute.

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