

Insurgent Participation in Environmental Impact Assessment in Brazil

An analysis of two insurgent movements in Brazil that exposed the limits of formal EIA participation and demanded more inclusive decision-making, in contexts marked by inequality and power asymmetries.

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Abstract

Public participation is a core principle of Environmental Impact Assessment (EIA); nevertheless, its mechanisms and effectiveness remain contested. Challenging the legitimacy of formal participation spaces, insurgent actions can delay, block, or reshape proposed projects. This paper examines two social movements — *Salve o Rio Itapanhaú* (Save Itapanhaú River) and *Barragem Não* (No Dam) — that reacted to environmental licensing processes for water resource projects in a context of scarcity in the state of São Paulo, Brazil. We explore how insurgent participation emerged and sought to influence decisions through informal channels. The methodology combines interviews with movement leaders and EIA actors with the analysis of minutes from public consultations and official approval documents. Findings show that the movements consider formal participation channels insufficient and criticize the technocratic nature of decision-making. Their mobilization did not overturn established power relations or stop the projects, but it contributed to improving environmental licensing conditions. We argue that the debate on participation in EIA must go beyond conventional mechanisms and build alternatives that effectively incorporate the perspectives of affected communities — especially in contexts marked by inequality and power asymmetry, such as in Brazil.

1. Introduction

Public participation is considered a core principle of Environmental Impact Assessment (EIA). However, several studies have questioned whether formal participatory mechanisms are capable of meaningfully influencing environmental decision-making and effectively incorporating affected communities' perspectives (DEVLIN; YAP, 2008; GLUCKER et al., 2013; DUARTE; DIBO; SÁNCHEZ, 2017; IRARRAZAVAL et al., 2023).

In contexts marked by inequality and power asymmetries — such as Brazil and other Latin American countries — understanding the limitations and gaps of formal participation in EIA becomes particularly relevant (DEVLIN; YAP, 2008; IRARRAZAVAL et al., 2023). Affected communities often perceive formal participation mechanisms as insufficient, technocratic, or merely symbolic (DUARTE; DIBO; SÁNCHEZ, 2017). In response, social movements may organize through informal and insurgent forms of participation, including protests, political articulation, legal actions, and community mobilization (DEVLIN; YAP, 2008; IRARRAZAVAL et al., 2023).

This study examines how these dynamics emerged during environmental licensing procedures for water infrastructure projects in the state of São Paulo, Brazil. The projects analyzed are in the São Paulo Macrometropolitan Region (Macrometrópole Paulista – MMP), a large, urbanized territory that includes the metropolitan regions of São Paulo, Campinas, Baixada Santista, Sorocaba, and Vale do Paraíba and North Coast, in addition to other urban agglomerations. The region concentrates a large share of the state population and economic activities, with intense flows of people, goods, services, and infrastructure.

Ensuring water availability for this territory has become one of the major regional challenges. Water reservoirs and supply systems are under constant pressure due to population growth, urban expansion, industrial activities, and climate variability. Between 2014 and 2015, São Paulo experienced a severe water crisis associated with extreme drought conditions. The crisis exposed vulnerabilities in the regional water supply system and intensified discussions around water security and infrastructure expansion.

In this context, several water infrastructure alternatives already included in regional water resources planning were subsequently prioritized and advanced after the crisis. Among these projects, the following cases are analyzed in this study:

Table 1. Description of the analyzed projects. Source: Prepared by the author.

Project	Purpose	Description
Itapanhaú River Water Transfer	Inter-basin water transfer project designed to divert water from the coastal region of Bertioga to the São Paulo metropolitan area.	The project includes a water intake from the Sertãozinho River, pumping stations, tunnels excavated through the Serra do Mar mountain range, and approximately nine kilometers of steel pipelines. The system was designed to transfer around two cubic meters of water per second, with a maximum capacity of two point five cubic meters per second.
Pedreira and Duas Pontes Dams	Construction of two medium-sized dams in the Campinas region to increase water storage capacity and improve drought resilience in the PCJ river basins.	The projects involve mixed structures of concrete, soil, and rockfill, including reservoirs capable of storing approximately eighty-five billion liters of water in total, benefiting more than five million people. The infrastructure also includes spillways and fish passage systems.

Both projects became highly controversial among affected communities and triggered social mobilization during the environmental licensing procedures. In the first case analyzed, the directly affected population is in the coastal municipality of Bertioga, where the Itapanhaú River water transfer project was proposed. The affected groups included local residents and caiçara communities. Caiçaras are traditional coastal communities in Brazil whose ways of life have historically been associated with small-scale fishing, crab harvesting, and other activities connected to estuarine and coastal ecosystems. The mobilization of teachers, environmental activists, and members of caiçara communities led to the formation of the movement *Salve o Rio Itapanhaú* (“Save the Itapanhaú River”).

In the second case, the directly affected population included rural and urban residents from the municipalities of Pedreira and Amparo, located in the Campinas region, where the Pedreira and Duas Pontes dams were proposed. Residents and environmental activists mobilized against the projects, forming the movement *Barragem Não* ("No Dam"). In addition to local actors, the mobilization also involved support networks connected to broader environmental and water governance movements active across the São Paulo Macrometropolitan Region (MMP) and at the national level.

Affected communities opposed these projects, organized protests, and developed alternative forms of participation. These mobilizations provide an opportunity to examine how insurgent participation emerges when formal participatory mechanisms are perceived as insufficient. Therefore, this study examines how affected communities organized during environmental licensing procedures, how insurgent participation emerged beyond formal EIA mechanisms, and how these actions influenced environmental decision-making.

2. Methods

To capture the perspectives of affected communities, this study combined documentary analysis and semi-structured interviews. The documentary analysis examined transcripts of public hearings and minutes from meetings of the State Environmental Council conducted during the environmental licensing procedures. This stage sought to identify how affected communities participated in formal decision-making spaces, as well as the main limitations, tensions, and perceived gaps associated with these participatory mechanisms.

The second stage consisted of interviews with movement leaders, affected people, and actors involved in the environmental licensing processes. The interviews aimed to understand how social mobilization emerged in response to dissatisfaction with formal participation mechanisms and how affected communities organized insurgent actions and alternative forms of political articulation.

The material was analyzed using qualitative content analysis (BARDIN, 2011), focusing on perceptions of formal participation, motivations for mobilization, insurgent participation strategies, and the influence of these actions on environmental decision-making processes.

3. Results and discussion

The first issue concerns why affected communities mobilized. The documentary analysis revealed that affected communities frequently felt misinformed and unheard during the environmental licensing procedures. Interviewees and statements recorded in official meetings expressed perceptions of lack of transparency, the use of technical language as a barrier to participation, and the impression that key decisions had already been made before public consultation processes took place. In this context, public hearings were often perceived as merely procedural or symbolic mechanisms, incapable of meaningfully incorporating local demands into decision-making.

As dissatisfaction with formal participation spaces increased, affected communities expanded their strategies beyond the official EIA mechanisms. Social movements organized protests and demonstrations, petitions, public campaigns, and legal actions supported by the Public Prosecutor's Office. At the same time, they developed alternative ways of public engagement through educational and cultural activities, community meetings, school discussions, exhibitions, performances, and other collective initiatives aimed at broadening public debate around the projects. The movements also articulated with environmental organizations operating at regional and national scales. These actions created alternative arenas for participation outside formal environmental licensing procedures.

Another question is how these mobilizations influenced decision-making. Popular mobilization led to legal actions and temporary suspension of the licensing procedures in both cases. Despite this, the effects were temporary, as the procedures were later resumed and the projects were approved.

Although the movements did not stop the projects or reverse the environmental licensing decisions, social mobilization partially influenced the processes and increased public visibility of the conflicts. In the Itapanhaú case, one of the central concerns raised by affected communities involved the potential impacts of water withdrawal on the estuarine ecosystem and mangrove areas near the river mouth. As a result of public pressure and continuous mobilization, the environmental license incorporated a specific monitoring requirement focused on the estuarine ecosystem, which can be understood as a partial outcome of the movement's actions.

In the Campinas case, no direct relationship was observed between the mobilization and changes in the licensing decision itself. However, during the implementation phase of the dams, citizen service centers were created to improve communication between the project developers and the affected population. Although it is not possible to determine to what extent these measures had already been planned, the mobilization may have encouraged greater attention to communication and public engagement strategies.

However, ten years later, both projects are under construction, and the movements have largely demobilized. The analysis highlights the difficulties of sustaining long-term mobilization. Structural barriers such as work obligations, economic insecurity, unequal power relations, and fear of political retaliation were frequently mentioned as important limitations to continued participation and collective action.

4. Conclusions

The cases analyzed highlight power asymmetries and important limitations of public participation in EIA and environmental licensing processes in Brazil. The insurgent movements reinforced criticisms already identified in the literature regarding the limited incorporation of affected communities' perspectives into environmental decision-making. The analysis suggests that EIA procedures tend to prioritize technocratic forms of analysis that frequently favor developers' interests and reproduce existing power structures, while public consultation processes are often perceived as insufficient to meaningfully influence decisions.

At the same time, the study shows that insurgent participation emerged as an alternative response to dissatisfaction with formal participatory mechanisms, creating additional spaces for political articulation and public engagement. However, although these mobilizations increased conflict visibility and partially influenced some aspects of the licensing processes, they could not confront entrenched structural relations or prevent project implementation.

The lessons from these cases suggest that achieving meaningful public participation in EIA requires a fundamental shift in the way participatory processes are conceived and implemented. Debates on participation in EIA should move beyond conventional consultation procedures and seek more effective ways of incorporating the perspectives of affected communities into environmental decision-making, particularly in contexts such as Brazil and other Latin American countries.

REFERENCES:

BARDIN, Laurence. *Análise de conteúdo*. São Paulo: Edições 70, 2011.

BIGOLIN NETO, Pedro; MALLETT, Alexandra. Public participation in environmental impact assessment processes through various channels – Can you listen to us now? Lessons from a Brazilian mining case. *The Extractive Industries and Society*, v. 13, p. 101186, 2023.

DEVLIN, John F.; YAP, Nonita T. Contentious politics in environmental assessment: blocked projects and winning coalitions. *Impact Assessment and Project Appraisal*, v. 26, n. 1, p. 17–27, 2008.

DUARTE, Carla Grigoletto; DIBO, Ana Paula Alves; SÁNCHEZ, Luis Enrique. What does academic research say about impact assessment and environmental licensing in Brazil? *Ambiente & Sociedade*, v. 20, p. 261–292, 2017.

GLUCKER, Anne N. et al. Public participation in environmental impact assessment: why, who and how? *Environmental Impact Assessment Review*, v. 43, p. 104–111, 2013.

IRARRAZAVAL, F.; STAMM, C.; MADARIAGA, A.; MAILLET, A.; FRANETOVIC, G. Examining the effects of social protest on the environmental impact assessment process in Chile. *Environmental Impact Assessment Review*, v. 99, p. 107044, 2023.

MIRAFATAB, Faranak. Insurgent Planning. In: _____. *Insurgent planning: situating radical planning in the Global South*. New York: Routledge, 2017.

RUNHAAR, Hens; DRIESSEN, Peter. What makes strategic environmental assessment successful environmental assessment? The role of context in the contribution of SEA to decision-making. *Impact Assessment and Project Appraisal*, v. 25, n. 1, p. 2–14, 2007.

LINKS:

More information about the Save the Itapanhaú movement can be found here:

[Save the Itapanhaú movement on Facebook](#)