

Mining and social conflict in Latin America

Which factors drive conflict escalation?

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Extraction of metal and mineral ores exerts pressure on the environment and on societies, which can lead to social conflicts between local populations, mining companies and the state. We analysed around 300 mining conflicts in Latin America to find out which factors influence different escalation stages in these conflicts. We show that the type of groups involved and the timing of mobilisation have effects on the escalation stage, while the category of mined commodity has no clear influence on conflict escalation.

Global demand for metals and minerals is rapidly increasing. They are needed for the construction and maintenance of buildings, transport and communication infrastructures, as well as for the production of machinery and consumer goods. The extraction of these resources exerts pressure on the environment, e.g. through pollution and waste, and on society, e.g. through displacement of people and destruction of livelihoods. For these reasons, mining conflicts emerge as social conflict between local populations, mining companies and the state.

In 2019, more than four activists were on average killed every week worldwide defending territories against the invasion of industries like mining, logging or agribusiness, with mining being the deadliest sector of all. More than half of those killings occurred in Latin America in the context of mining [1]. In that region, the mining sector experienced a significant increase in investments in the past decades and the occurrence of mining related conflicts increased accordingly [2]. The [Environmental Justice Atlas](#) [3], a database hosted by the Autonomous University of Barcelona, documents 296 cases of mining conflicts across Latin America (Figure 1).

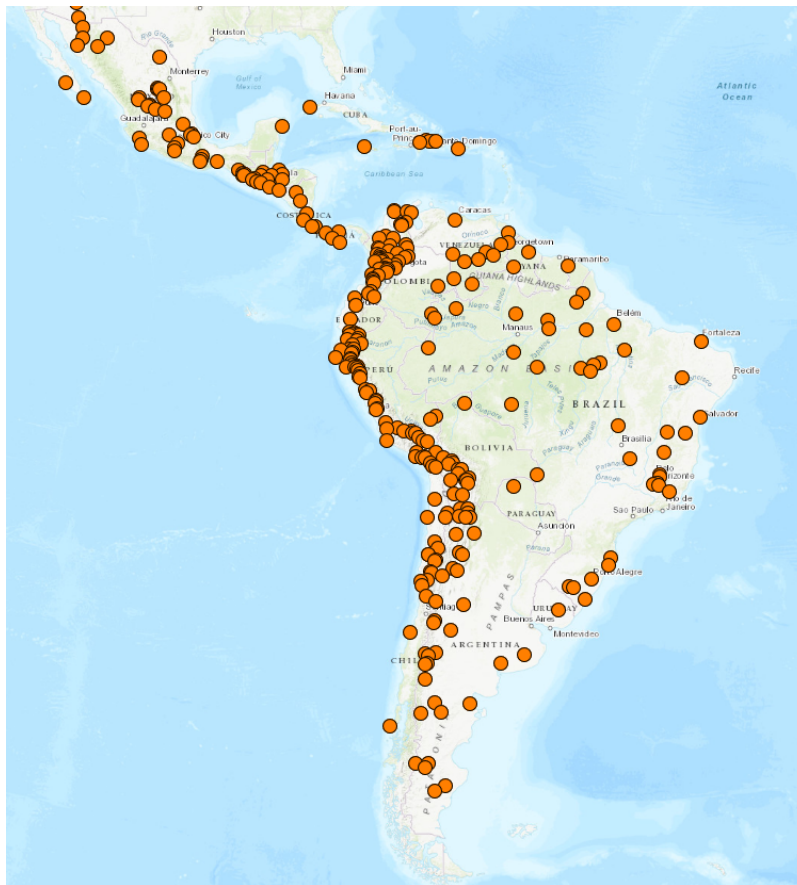


Figure 1: Mining conflicts in Latin America, Environmental Justice Atlas (www.ejatl.org)

How to define escalation in mining conflicts?

The research aim was to find out which factors influence different escalation stages in mining conflicts. Leaning on the classification of conflict escalation stages by Yasmi and colleagues [4], who investigated patterns of conflict escalation in natural resource management conflicts, the escalation stages were defined by the forms of mobilisation (actions by protestors, see Figure 2) and the responses by the company or the state (see Figure 3).

Each form of mobilisation and conflict outcome/response was categorised into the following four escalation stages:

- A) Campaigns, protests, blockades: conflicts of moderate intensity with street protests and media campaigns or petitions, but also conflicts including actions like blocking roads
- B) Legal action: conflicts with judicial activism, or court decisions
- C) Violent action: from corruption and repression to assassinations of activists
- D) Nationalisation or internationalisation: conflicts reaching (inter)national awareness

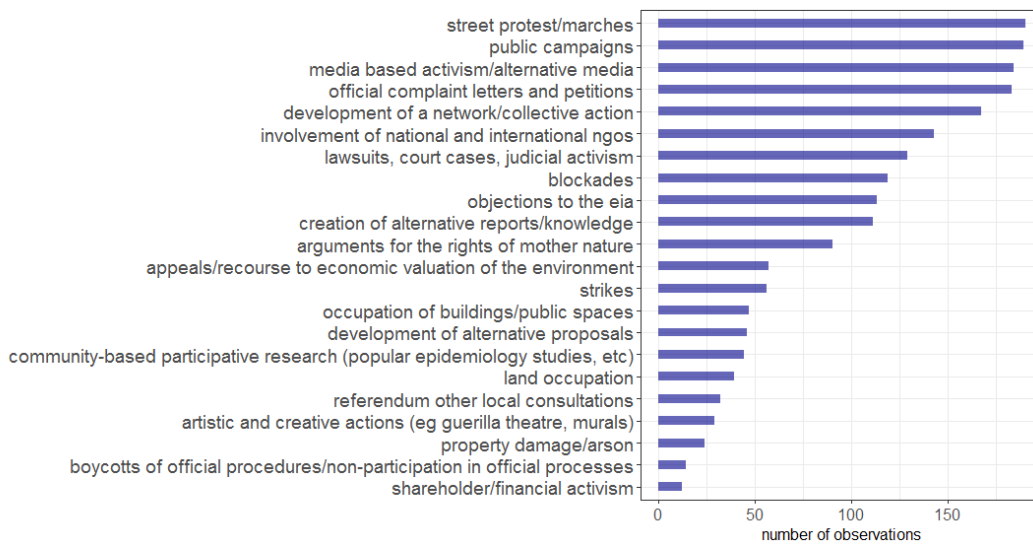


Figure 2: Forms of mobilisation in mining conflicts; data from Environmental Justice Atlas (www.ejatl.org)

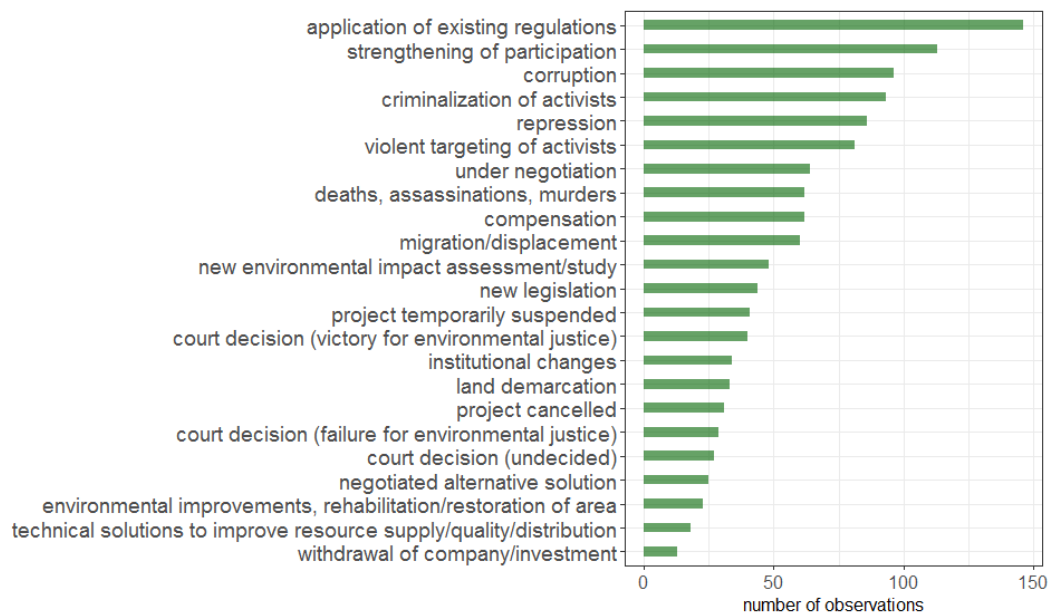


Figure 3: Outcomes/responses in mining conflicts; data from Environmental Justice Atlas (www.ejatl.org)

Which factors influence certain escalation stages in mining conflicts?

To find out which factors influence certain escalations stages, a multinomial logistic regression was applied. This method performs a logistic regression on multiple nominal outcomes, meaning a regression on categories A, B, C, or D for the escalation stage in our case.

We tested the impacts of the following influencing factors:



- Type of commodity: base metals and ferroalloy metals, nonferrous metals, precious metals, non-metallic minerals, energy sources, biological resources
- Operator origin: foreign company, local company, illegal mining
- Mobilising groups: the different specific groups were divided into four categories — organisation, economic actors, local people, excluded/marginalised
- Timing of mobilisation: preventive, during construction, for reparations
- Environmental impacts: visible or potential
- Socioeconomic impacts: visible or potential
- Health Impacts: visible or potential
- Additionally, we controlled for country-specific effects.

Mining conflicts as an issue of Environmental Justice

The findings show that the presence of specific mobilising groups and the timing factor in mobilisation are the major factors that influence escalation stages in mining conflicts. When excluded or marginalised groups are involved, it is more likely that conflicts include violent responses or reach the national or international level. Excluded or marginalised groups are indigenous groups and traditional communities, women, and ethnically/racially discriminated groups. In contrast, when conflicts involved local people, such as neighbours/citizens/communities, recreational users, conservationists, and youth, they are less likely to include violent responses. Organisations as mobilising groups have a higher probability to lead to nationalised or internationalised conflicts. In comparison to preventive mobilisations, those in reaction to construction or implementation and mobilisations for reparations increase the likelihood of conflicts with violent action. We observed no significant effects on conflict escalation stages for the type of commodity, company origin, or presence of visible/potential mining impacts.

The results relate conflict escalation less to firm and commodity characteristics than to socio-environmental factors. Affected communities in mining conflicts suffer from environmental, health and socioeconomic impacts, regardless of the type of resource extracted. Thus, it seems that not the type of material extracted, or the toxicity of the extraction techniques affect how resistance to mining escalates. Rather, social processes related to extraction influence the development of mining conflicts. The theory of Environmental Justice brings attention to these social processes. Groups mobilising against mining projects demand equity in distributional justice, recognition of their rights and participation in decision-making processes [5]. The dependency of Latin American economies on primary material exportation requires increased investments in the industry and the appropriation of new mining territories. Their dependency reinforces the process of Accumulation by Dispossession [6]. Data from the Environmental Justice Atlas shows that mostly rural people are affected by dispossession when new land areas for resource extraction activities are required (69 % of Latin American cases). Extraction practices entail physical landscape modifications and production of wastes and water and air pollutants, but also drive regional and global environmental change, which in the end is disproportionately affecting low income communities, especially those living in the Global South [5].



Excluded or marginalised groups such as indigenous people, women, or ethnic minorities are those affected most frequently by violent responses to their resistance. In most cases, affected communities are excluded in the planning process of extraction projects, which could explain their unrest in mobilisations in reaction or for reparations once impacts have been felt. In comparison to preventive mobilisations, mobilisations in reaction to construction or implementation as well as those for reparations increase the likelihood of conflicts with violent action. For excluded or marginalised groups, it might not be that relevant whether it is lead, gold or lime that is extracted, even if the extraction techniques can change aspects in the mobilisation. The protection of their lands and culture might be more important in their fight to gain their right to participate in decisions that fundamentally affect their way of living.

Limitations and outlook

Our results are important to understand the escalation dynamics of mining conflicts with similar characteristics. The classification of escalation stages applied on the Environmental Justice Atlas data thereby helped to gain insights on the intensity of mining conflicts. Our findings emphasise the importance of focusing on those conflicts with characteristics of higher escalation probability, in order to increase prevention and reduce impacts. However, the generalisability of the findings is most of all limited due to the small sample size and lack of variation in the observations of specific metals and minerals. With a larger sample size, the nominal outcomes for escalation stages would show higher variation. What needs to be researched in the future is the order in which escalation stages develop and whether there are any effects of specific metals or minerals, their extraction amounts, price levels or investments volumes on the escalation pattern of mining-related conflicts.

Citation

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