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Contested Landscapes, Disputed Realities: An Investigation of Socio-Environmental Conflict From Mining in Northern Ecuador: An Honors Thesis

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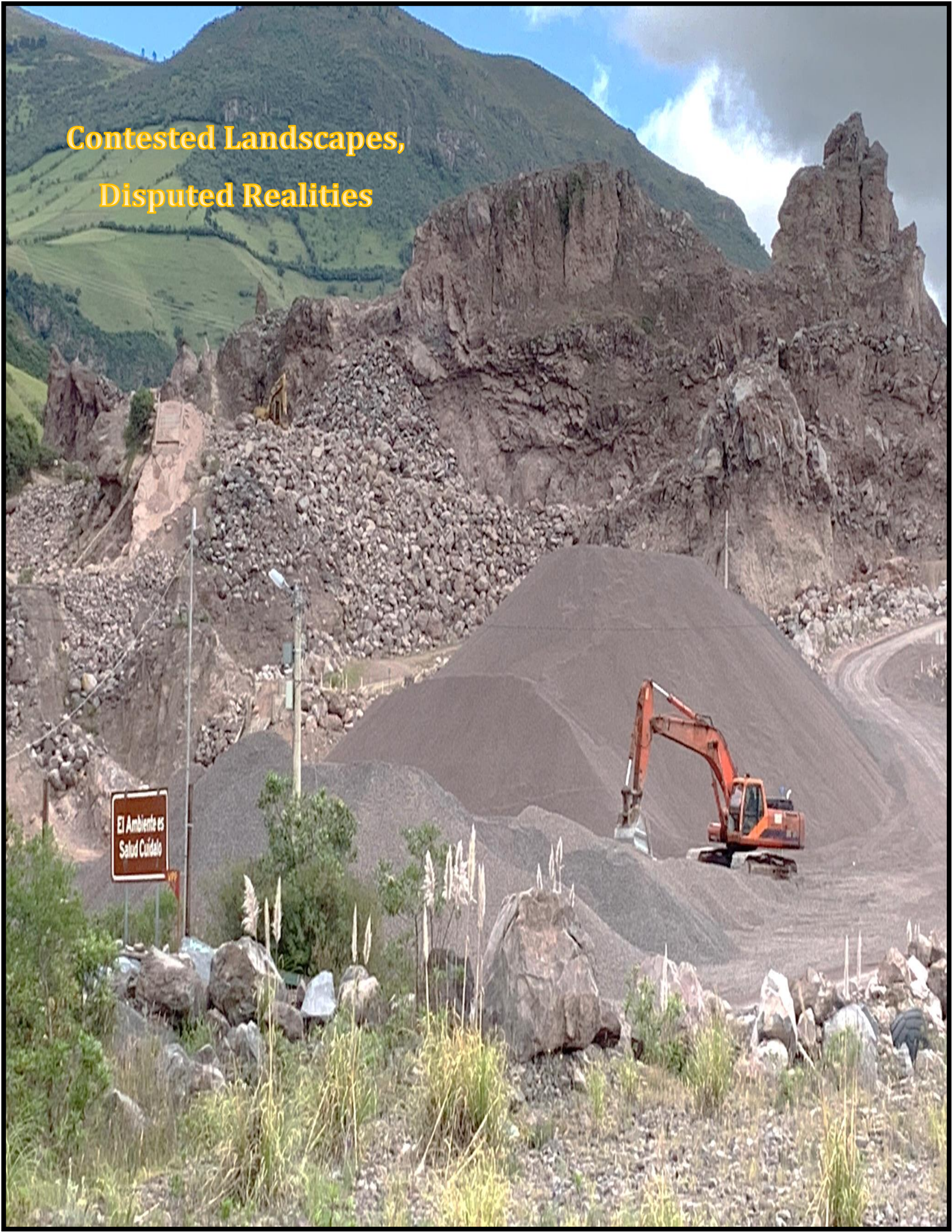
Contested Landscapes, Disputed Realities



Cover Image: Pushing up against the westernmost extent of the Antisana Ecological Reserve, the "Piedras Rojas" quarry sits adjacent to a river valley that provides valuable irrigation water for nearby agricultural communities. The sign to the entrance of the quarry reads, in Spanish, "The environment is health, take care of it." Photo taken February 16, 2020 in Píntag, Ecuador by the author.

CONTESTED LANDSCAPES, DISPUTED REALITIES: AN INVESTIGATION OF SOCIO-ENVIRONMENTAL CONFLICT FROM MINING IN NORTHERN ECUADOR

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TABLE OF CONTENTS

ABSTRACT

CONTESTED LANDSCAPES, DISPUTED REALITIES: AN INVESTIGATION OF SOCIO-ENVIRONMENTAL CONFLICT FROM MINING IN NORTHERN ECUADOR

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For decades, Ecuador has been one of the preeminent petrostates in South America. However, in response to recent drops in global demand and pricing for oil products, the country has made serious commitments to further develop its mineral resources. By opening a new natural resource sector, Ecuador has firmly cemented itself as a primarily extractivist nation. In the process, the national government has frequently come into conflict with activist and community groups who protest the encroachment of extractive industry. This thesis explores the various dimensions of socio-environmental conflict created by large-scale mining projects in northern Ecuador with specific attention to the Intag Valley. It will first discuss the broader motivating factors underlying the Ecuadorian government's increased investment in mining. Mining is investigated as a central driver of socio-environmental conflict within the Intag Valley, drawing from archival accounts of the region's lengthy history of mining-related confrontation. Four broad categories of conflict are subsequently defined here: territorial dispossession, environmental disharmony, social discord, and gender inequities. In each category, mining projects create instances for conflict to emerge between local inhabitants, natural landscapes, and pro-mining interests, leading to a wide assortment of intracommunity disruptions. The investigation elaborates how these conflicts have manifested in numerous attempts made to

extract Intag's mineral reserves. Accordingly, local opposition to mining has been persistent and widespread throughout the Intag Valley, with various resistance tactics implemented to counter each element of socio-environmental conflict. Concluding insights show that mitigating the impacts of mining-generated socio-environmental conflict should take policy priority in Ecuador under a foreign investment-oriented administration. Overall, to understand how and in what forms mining creates socio-environmental conflict holds salience for communities in Ecuador, and elsewhere around the world, who struggle to confront extractivist development agendas.

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INTRODUCTION — ECUADORIAN MINING IN CONTEXT

> "It is madness to say no to natural resources, which is what part of the left is proposing — no to oil, no to mining, no to gas, no to hydroelectric power, no to roads [...] We cannot lose sight of the fact that the main objective of a country such as Ecuador is to eliminate poverty. And for that we need our natural resources. There are people here who seem ready to create more poverty but leave those resources in the ground, or who even see poverty as something folkloric [...] Oil has caused a lot of harm, and mining has practically destroyed entire countries, but it doesn't have to be that way [...] In order to change the situation we need hundreds of millions of dollars. We can obtain those resources from mining. That is to say, the proper exploitation of natural resources can help to conserve nature rather than destroying it."
>
> — Rafael Correa (2012), 45th President of the Republic of Ecuador[1]

For the better part of the 21st century so far, the Ecuadorian government has made substantial gains in developing and expanding its large-scale mining industry. Consequently, a salient debate has emerged in the country concerning the merits of natural resource extraction to achieve development goals. Ecuador's gains in its mining sector are indicative of a wider phenomenon across Latin America in recent decades where countries have sought to take steps to unlock their mineral resource potential (Bebbington, 2012). By doing so, it is hoped that the material wealth of minerals born up from the subsoil of the earth will translate into economic and developmental success on the surface. However, the mining industry can induce other, more harmful impacts including various manifestations of socio-environmental conflict into immediate communities, sometimes with violent or deadly consequences. These types of conflicts can also generate spillover effects with far-reaching impacts for ecosystems and the biodiversity of natural landscapes.

Contested Landscapes, Disputed Realities

Socio-environmental conflict due to mining in Latin America has been particularly acute, given the region's extensive mineral deposits and proclivity for natural resource extraction. As it turns out, all countries across Latin America that contain a mining project have recorded at least some element of socio-environmental conflict between local communities and pro-mining interests (Svampa, 2019). Conflict associated with mining projects throughout Latin America have been dutifully recorded for years by the Observatory of Mining Conflicts in Latin America (OCMAL). Recent data collected by OCMAL reveals a total of 277 mining-related conflicts spanning 17 countries since it began operation in 1997 (OCMAL, 2020).

The extraction of primary commodities in Latin America — most pertinently those of oil, minerals, rubber, and timber — is part of broader spatial and temporal changes across the region (Bury and Bebbington, 2013). As the Uruguayan political journalist Eduardo Galeano (1997) postulated with his seminal work *Open Veins of Latin America*, the long timescale of extraction and exploitation of Latin America's resources commenced with the arrival of Spanish *conquistadores* (conquerors) in 1519. As Galeano notes, from this time to more than 500 years later, the material flow of capital, people, and natural resources has been for the benefit of foreign and distant centers of power. This unequal exchange has, as Galeano figures, contributed to the "poverty" and resultant "backwardness" of Latin American societies. In this sense, Latin America has been rendered the respective "loser" in the global game of capitalistic development (Galeano, 1997).

Connecting the mineral exploitation of the region with the fall of the once-powerful Mayan, Aztec, and Incan civilizations of the pre-colonial Americas, Galeano

(1997: 43) writes further that "the installation of a mining economy had direr consequences than the fire and sword of war." Previously agricultural communities became fragmented, and a great deal of people were displaced, many of which were subsequently forced to labor in the mines to the point of death. As Galeano pointedly elaborates, the imperialist obsession with the subsoils of Latin America has forced the region to evolve economies reliant on the extraction, processing, and export of primary commodities.

While locked into the continual cycle of extractivism (*extractivismo*),[2] many countries across the region have failed to fully realize the potential positive advancements (Bebbington, 2012). Some elements of extractivism can be lost in translation, but the term essentially has come bear significant meaning in Latin American political discourse (Svampa, 2012). As Svampa (2012) elaborates, extractivism comprises an economic cycle of large-scale boom or bust projects geared towards meeting growing capitalistic demand for raw materials while continually ensuring economic growth. Extractivism is also oriented towards process of accumulation that essentially turn Latin American nations into resource-exporting economies. The extractive model of economic growth has been asserted as necessary for reaching developmental goals but has not always resulted as such.

The trade-off between so-called natural resource wealth and challenges to political and economic stability has been referred to as the "resource curse" theory (Auty, 1993). The various elements of this theory have been widely debated in scholarly circles, but the basic idea remains that economic growth and political stability are hindered in a country that resorts to a heavy reliance on natural

resources rents (Auty, 1993; Karl, 2005; Sachs and Warner, 2001). Consensus seems to be lacking on the theory's usefulness for explaining low development indexes in countries rich with natural resources. One study has suggested that though numerous economic and political variables are at play, an overt dependence on one or two natural resource sectors presents a plausible explanation (Badeeb *et al*. 2017). However, even if the utilization of natural resources provides short-term bursts to a country's economic growth rates, the institutionalization of extraction as a developmental model appears unwise (Acosta, 2016; see also Cori and Monni, 2015).

Ecuador has been demonstrated to be a standout example of the "resource curse," being one of the more persistent advocates of natural resource extraction within its borders while suffering declining institutional quality (Cori and Monni, 2015). Located in the mountainous Andes along the northwest coast of South America, the small biologically and climatically diverse nation has positioned itself as one of the more determined petrostates in the western hemisphere. Ever since the 1960s when the first oil exploration was carried out in the Amazon lowlands, Ecuador has prioritized the oil sector along with infrastructure spending to expand its extraction, processing, and subsequent export. Throughout this time, metallic mining was not yet a promising economic activity. In contrast, neighboring Peru, and nearby Chile, have long developed their respective mineral wealth under state-led and private regimes and are now both considerable players in the global mining industry.

After encountering dual crises of falling global oil prices and declining domestic reserves, the Ecuadorian government subsequently began to prioritize developing its large-scale mining sector. Specifically, the country's high-quality

reserves of copper ore, gold, and silver became central to the industry's rapid growth (Riofrancos, 2017), with exceptionally large deposits discovered in the mountains of the northern and southern Andean sierra. Recent market research statistics have forecasted the industry to grow in value from an estimated $1.1 billion USD in 2017 to $7.9 billion USD in 2021 — a nearly eightfold gain (Jamasmie, 2017). Additionally, Ecuador anticipates mining investments in the country to reach $3.7 billion between 2019 and 2020, up from a relatively meager $270 million in 2018 alone (Jamasmie, 2020). The exponential growth in mining within the country has already had significant consequences on the natural environment and communities who occupy sites of mineral interest. Looking into the near future, as the Ecuadorian government seeks to diversify its export-dependent economy with mineral commodities, it is likely that socio-environmental conflict will continue to escalate.

The central aim of this paper is to examine how resource extraction in the form of major mining projects spurs socio-environmental conflict and how it has occurred in the Intag Valley. In addition, this research questions how the communities of the Intag Valley have resisted large-scale mining initiatives while enduring the various elements of socio-environmental conflict. To answer these questions, I draw from archival, documentary, and second-hand accounts to understand the intersection between mining and socio-environmental conflict using the Intag Valley as a case study. To do so, I utilize the rich literature of political ecology to understand human-environment conflicts over nature and the distribution of harms and benefits from extractive projects. For the purposes of this paper, I have created a framework that investigates four dimensions of socio-environmental conflict: territorial

dispossession, environmental disharmony, social discord, and gender inequity. Within each dimension, I present the various discernible impacts that both effectively fuel and aggravate socio-environmental conflict.

Within the dense cloud forests of Northern Ecuador that make up the lush Intag Valley, subsurface mineral abundance has become synonymous with the regional landscape, an important area of biodiversity filled with endemic flora and fauna. Considering the current era of dwindling natural resources and worrying increases in environmental degradation, it is pertinent to understand the dynamics of natural resource extraction and how conflict arises in response.

THE POLITICAL ECONOMY OF NATURAL RESOURCE EXTRACTION IN ECUADOR

> "When asked why Ecuador needs mining, Ecuador's under-secretary of energy and mining replied, 'Ecuador has the moral obligation to conduct mining…the world needs minerals. Ecuador has minerals. Ecuador has the obligation to provide them'" (Kuecker, 2007: 95).

> "For the Ecuadorian Government, the development of an [*sic.*] industrial mining is very important, and should be executed with clear regulations and bring benefits, especially for the inhabitants of the areas of influence of the mining projects."
>
> — Rebeca Illescas, Minister of Mining (Ecuador Catálogo Minero, 2018)

The rise of Ecuador's mining sector is closely linked to the ostensibly leftist and self-defined post-neoliberal administration of Rafael Correa who served as the President of Ecuador from 2007-2017. Correa, who previously served a short stint as Finance Minister before being elected President, ultimately became one of the strongest advocates for expanding Ecuador's large-scale industrial mining sector.

Much of the legal reform and reworking of mining legislation that Correa utilized in pushing the mining sector, however, took place under previous pro-extraction administrations decades earlier.[1] For Ecuador, mining provided an offramp to the volatility of the international oil market, to which the country's economy had become entirely beholden. Throughout his tenure, Correa focused many policies and legislation to both offset lost oil revenues and to create a financial base to meet his commitments to improve social policy in the country (Bebbington, 2009).

Correa viewed mining as an integral part of his "Citizen's Revolution" or "Twenty-First Century Socialism" agenda. Supposedly, it would augment the state's ability to increase social investment to some of the nation's most disenfranchised and marginalized groups (Correa, 2012; Riofrancos, 2020). This new era of Left governance would, as Correa promised during his presidential victory speech, help "recover the homeland" and "bring an end to the long neoliberal night" (*El Mundo*, 2006).[2] As a member of Latin America's Pink Tide — the region-wide turn towards left-wing politics that occurred in the early to mid-2000s — Correa's election gave hope for the social and economic change desired for years by progressive, grassroots, and Indigenous activists in Ecuador (Riofrancos, 2020). Instead, Correa based his appeal in a certain form of left populism that centralized power and prolonged the country's reliance for extracting primary commodities to fund state revenues; a governmental model dubbed by political opponents as *correísmo* (Riofrancos, 2017; see also Gudynas, 2010).

Even though the policy ethos of *correísmo* yielded improvements to some measures of poverty, health, education, and economic inequality in Ecuador

(Riofrancos, 2017), Correa's position on mining proved overtly divisive. Many of his supporters took issue with his defiant inclusion of mining as a fixture within the country's economy and public denigration of those who opposed this perspective — especially for social movements that emerged and took to the streets in protest (Moore and Velásquez, 2013; Riofrancos, 2020).

As Correa embraced popular sector anti-extraction support during his campaign run, his actual administration seemed to develop mining policy on convergent tracks: one which brought substantive reforms to the mining sector to redirect greater economic benefits to the state; and another that sought to temper the influence of social movement activism on such reforms (Moore and Velásquez, 2013). Considering that Correa positioned himself as the right man to guide Ecuador out of "the long neoliberal night," it is revealing that, in fact, the direct opposite has occurred. By bringing mining policy further under the purview of the state, foreign multinational investment has instead continued to receive favor over rural community development (Moore and Velásquez, 2013; see also Riofrancos, 2017).

Correa had visions for Ecuador to eventually become a *Pais Minero* (Mining Country) and get away from oil, leaving behind the negative connotations associated with the moniker of "petrostate" (Riofrancos, 2017). Early in his tenure, Correa had hoped to leave oil in the ground and stay away from large-scale mining, instead raising funds by renegotiating existing oil contracts and restructuring tax bases (Correa, 2012). He soon, however, changed his tune in response to a pending economic crisis triggered by the loss of oil revenues and the collapse of the Yasuní-ITT Initiative, a co-responsibility accord made with European funders to keep nearly

900 million barrels of oil unexploited in the Amazon lowlands (Martin and Sholz, 2014). From this point forward, Correa found it increasingly difficult to ignore the vast amount of natural resource wealth lying underneath his country's borders.

As Correa hardened his belief in the merits of mining and extraction in general, Alberto Acosta, a co-founder of "Twenty-First Century Socialism" and Correa's first Minister of Energy and Mines and later President of the Constituent Assembly, resigned from his position and Correa's campaign in dissent.[3] A key voice of support for environmentalists' efforts to reform the mining sector, Acosta's departure further galvanized Correa's beliefs in the benefits of large-scale mining for the Ecuadorian state (Riofrancos, 2020). In turn, the well-endowed mineral reserves, especially of copper, throughout the centrally located mountains of the Andean sierra — the "spine" of Ecuador — proved irresistible.

Resource sovereignty

By expanding its extractives sector, Ecuador has made clear that it intends to exploit and leverage its wealth of mineral deposits. Though not historically a mining nation, Ecuador has previously expressed desires for greater sovereignty over its natural resource reserves (Riofrancos, 2020; Warnaars and Bebbington, 2014). With the forecast of oil prices and future extraction opportunities diminishing, minerals are expected to provide the Ecuadorian state with a new, previously unexplored source of revenue. "Unexplored" is a commonly recurring term within pro-mining discourses. According to the state, there is little downside to furthering knowledge and information of what types of minerals and how much may exist within the country's subsoil (Riofrancos, 2020).

Additionally, as the state acquires further information about its mineral reserves, the space for protest and objection to potential socio-environmental impacts has narrowed, particularly so under the laws of the former Correa Administration. As exemplified in instances of intense community resistance described by Ycaza (2019) and Zorrilla (2018), the Correa administration has demonstrated intolerance for any groups or social movements that, from its perspective, seek to deny the Ecuadorian state of its own resources.

Mining as a technical solution

To the Ecuadorian state, mining presents a more modern, clean, and hi-tech route than oil for raising state revenue from resource rents. Considering the extreme social and ecological costs oil has wrought on the country's natural environment, mining will supposedly be involved in shifting the nation towards a "post-neoliberal" future (Davidov, 2013). In state-promoted discourse, the industrial mining sector in Ecuador has great potential that deserves consideration. As Correa has alleged, mining can bring the Ecuadorian government the economic resources it needs to bring about progressive social change without the environmental destruction that has accompanied oil extraction (Correa, 2012).

Overall, as the Ecuadorian government continues to rely on large-scale mining to provide resource rents, several key issues and tense debates have emerged over its professed benefits and potential drawbacks. Before turning to focus on mining-related conflict in the Intag Valley, the four dimensions of socio-environmental conflict analyzed in this thesis will be defined and substantiated in the relevant scholarly literature. Then, I turn to focus on the Intag Valley, illustrating how the four

forms of socio-environmental conflict that have manifested in the region and recognizing the resistance that has developed in response. Ultimately, this investigation will draw several important lessons from what makes Intag a successful case study in anti-mining activism while considering broader applications to other sites of extractive-related conflicts.

LITERATURE REVIEW: SOCIO-ENVIRONMENTAL CONFLICT

Through the lens of political ecology, socio-environmental conflict can be broadly understood as any type of social conflict with a human-environment interaction (Le Billon, 2015). As various forms of mineral extraction are promoted as a pathway to development around the world, the chances are high for socio-environmental conflict to occur.

This section will examine the contours of the literature regarding large-scale mining as an instigator for social and environmental conflict. The argument of this paper draws mainly from a range of secondary sources, including published journal articles, books, government reports, maps, online news columns, and other resources compiled in digital databases by local environmental and conservation organizations. The evidence gleaned from these resources will consist of both qualitative and quantitative examples to present an overview of the ways in which mining produces various forms of conflict. This review will cover the dynamics of four broad areas of conflict that emerge alongside the development of large-scale mining projects: territorial dispossession, environmental disharmony, social discord, and gender inequities.

I. Territorial dispossession

The possibility of industrial-scale mining introduces significant uncertainty and a sense of vulnerability in communities whose lands overlap with mineral concessions (Bebbington and Bury, 2013). Conflict in relation to large-scale mining activities often occurs in the physical movement and displacement of people as mining companies gain access to surface areas. The element of territorial conflict is more prevalent especially with open pit mines, which can have a much greater impact on the landscape due to the complete clearing of natural vegetation and people. As a result, mining can create conflicting narratives and differing beliefs over territorial claims to land and property (Bebbington *et al.,* 2008; Bebbington, *et al.*, 2019; Kuecker, 2007; Li, 2015).

The encroachment of extractive industry can also force a re-examination of land boundaries and ties to customary territory (Vela-Almeida, *2*018; see also Avcı and Fernández-Salvador, 2016). For resistance movements, a shared understanding of territory and ties to the land is core to coalescing support against mineral extracting activities (Bebbington *et al.,* 2008; Hilson and Liang, 2017). In these movements, it becomes clear that disputed understandings of local land and resource sovereignty are at the forefront of resistance to counter nationalistic visions of development by state and government entities (Riofrancos, 2020; Svampa, 2019; see also Vela-Almeida, 2018). Certain inspired notions of rights to land and territory also grow more pronounced as dispossession, displacement, and loss of livelihood occurs with the entrance, expansion, and exploitation of mining projects (Bebbington *et al.,* 2008; Kuecker, 2007; Warnaars and Bebbington, 2014). Accordingly, contrasting

claims of territory, property, and land rights all factor heavily into conflict spurred by large-scale mining.

Diana Vela-Almeida (2018) has suggested that mining creates territorial partitions amongst communities in the way of interests surrounding mineral extraction. In their analysis, for a plurinational and allegedly post-neoliberal nation like Ecuador, territory is the key component for the state to organize, explore, and retrieve its physical mineral assets. Strategies are employed to re-territorialize a particular space with the intention of creating new spaces of extraction perceived as promoting enhanced economic activity. With opportunities of a new natural resource frontier in mineral mining, territory is reimagined in terms of productive purpose, with the state claiming additional benefits for the public good from their ability to procure new resource rents. As the state sees it, territory is delineated as spaces needing governance and guidance whereas locals articulate territory as "associated to the multiple ways in which people reproduce their lives, livelihoods, imaginaries, and identities" (Vela-Almeida, 2018: 129). In these contrasting visions of territory, conflict arises from the trade-offs made by the state and the calculations it makes to generate sufficient financial resources to fulfill social policy promises.

For Bebbington *et al.* (2008, emphasis added), territory is produced by affected populations to assert a claim to resources *and ways of living*, thus resisting physical and spiritual dispossession. By articulating territorial ownership, populations intimidated by the approach of extractive industries mobilize resistance by "contesting *both* the colonization of life-worlds *and* the material threats to livelihood that flow from […] processes of accumulation" (Bebbington *et al.,* 2008:

2891, original emphasis). In this sentiment, affected groups organize to protest the acquisition of territory for mining projects by asserting their right to continue to occupy and live from their historical lands. As the authors conclude, social movements arise from the threat of dispossession and permanent changes to the region due to mining that would hamper rural territorial development.

Warnaars and Bebbington (2014) further identify that territorial disputes surrounding mining projects are part of broader discussions surrounding national resource use and land claims. In their case study of the El Pangui mine in Southern Ecuador they acknowledge that the land at the center of the mining claim has endured a long history of politicization and conflict over the mineral resources that lie beneath it. The interest of the state to claim the land from the Indigenous Shuar inhabitants has forced the territory to be wrapped up into the boom-and-bust cycles of Ecuador's natural resource-based economy. But for communities affected by mining, territorial issues become exposed in discussions over how land should be used and whether certain activities are 'sustainable' or 'ecological'. As the authors attest in their case study, the inhabitants of the region threatened by mining prefer their traditional usage of the land in agriculture, asserting that mining and agriculture are inherently incompatible (Warnaars and Bebbington, 2014).

Writing further about El Pangui, Ximena Warnaars (2013) demonstrates that understandings and "cosmologies" of territory are fluid, with both humans and nature as central actors in the process of territorialization. The process that occurs through territorialization is also influential in forming alliances and networks of social movements that work to counter mining, which cleaves deep forms of conflict into

communities. The loss of land through dispossession as result of colonization of the Ecuadorian Amazon through farming and mining signified moreover a loss of lifestyles and livelihoods for the Indigenous Shuar and other campesino communities. As a result, a business centered around land exchange and speculation began to develop, leading to further dispossession. Territorial conflicts wrought from mining and previous episodes of violence in the region, as Warnaars recounts, have melded into a daily routine for the local inhabitants. Therefore, struggles over land and resource use through recurring reterritorialization reform previous understandings of land and property rights (Warnaars, 2013).

As the arguments summarized above lay out, territorial dispossession and conflicts over land use due to mining are intertwined with complex notions of what territory signifies. For communities who find their land affected by mining projects, notions of territory and ownership become more pronounced. Social movements and uprisings consequently find that they must defend their concept of territory against the belief promoted by mining and extractivism. In this process, territory becomes contested ground, with conflict resulting over what constitutes and therefore delineates territory.

II. Environmental disharmony

Mining projects can degrade natural terrain and areas of biodiversity. The necessary destruction of the landscape in which mineral extraction occurs can create a nexus of conflict between people, native flora and fauna, and the general landscape (Özkaynak and Rodriguez-Labajos, 2012; Svampa, 2019; Warnaars, 2013). In this sense, mining as an extractive activity drives a wedge between the physical,

emotional, and spiritual environments and the groups who profess connections to each one in some form or another. Mining activities create imbalances in the physical spatial terrain that it exists on, bringing natural resources up from the ground as commodified materials (Bebbington and Bury, 2013). With mineral extraction comes further exploitation of the landscape, often in the form of access infrastructure such as roads or energy generation projects to supply the mines with cheap energy (Purcell and Martinez, 2018). Mining demands physical fractures of landscapes to access the subsoil, in the process creating conflicts that extend far beyond the proximate surface.

The resources of the subsoil can be of high value depending on global commodity markets, and the forces of capitalism. But extraction of minerals from the subsoil inherently jeopardizes the sustainability of the resources that capital depends on. As Bebbington and Bury (2013) write, the material underworld connects the physical world in the planes above it, leading to a reformation of thought for where these resources derive from. As mining delves up minerals from the soil into the international markets across the world, conflicts are borne up onto the surface.

Through her research in southern Ecuador, Warnaars (2013) records the spatial conflicts encountered on the landscape because of mining. The people encountered in the research report that the environmental terrain has endured tremendous physical changes to accommodate mineral extraction. All throughout, endemic flora and fauna began to disappear as the mine grew in size and scale to target deeper and richer deposits. On the surface, the destruction of the natural landscape inflicted by the mine was startling. As Wanaars recounts, local inhabitants reported the landscape had changed so drastically that it became unrecognizable.

Farmers in the region were no longer able to grow the same food they had before; trees that had previously provided shelter to the community and habitat for native bird species were all cut down. From this perspective, socio-environmental conflict with the landscape exists in the requirement for mining to affect the living beings on the natural terrain it takes place under.

III. Social discord

Mining projects can create internal divisions within communities. Such divisions can have myriad manifestations: disagreements between anti-mining and pro-mining neighbors (Warnaars and Bebbington, 2014); intra-party dissent amongst political groups (Riofrancos, 2020); fear of direct violence from pro-mining groups (Ycaza, 2019; Zorrilla, 2018); and even serious impacts to mental health and communal wellbeing (Caxaj *et al.,* 2014). In this view, mining acts as an instigator to increasing tensions within the community or the region in which the project takes place. Such tensions invariably have an adverse effect on the social cohesion of the local populations (Vela-Almeida, 2018). Social discord spurred by mining developments can also adapt over the course of the mine's presence, potentially mixing with other forms of conflict, eventually spiraling into a more profound sense of dispossession (Avcı & Fernández-Salvador, 2016; Warnaars, 2013). Conflict instigated by mining projects does not disappear once the productive life of the mine is exhausted either (Svampa, 2019).

In their study of the social impacts brought by a gold mine in the highlands of western Guatemala, Caxaj *et al.* (2014) record accounts of 56 Indigenous Mayan-Mam who testify to enduring a pervasive "climate of fear" since the arrival of mining in

their territory. Interviewees reported various threats purported by individuals associated with the mine inside the community who bullied or threatened residents who were against the mine or perceived to be so. Participants also described that the entrance of mining in the region had shifted the general atmosphere of the community from one of relative peace and harmony to one of fear and anxiety. The paranoia and stress of being constantly alert for signs of danger to themselves or their loved ones heavily impacted participants' overall mental health and led to a decrease in mental acuity with other daily tasks. As the authors relate, the presence of mining operations had ruptured community life such that even members of individual families began to turn on one another as being pro- or anti-mining. Besides the very real threats of physical violence perpetuated by guards acting under the discretion of the mining company, participants experienced high levels of stress and fear that infiltrated nearly every aspect of their daily lives. Witnessing open violence against community members who were suspected of being opposed to the mine also factored heavily into feelings of helplessness. Overall, the authors detected a substantial shift towards a general "social unravelling" of the community primarily influenced by the presence of nearby mining operations (Caxaj *et al.,* 2014).

The "social unravelling" identified by the authors in the previous study had a significant influence on sentiments of rising polarization amongst community members, specifically in terms of who in the community is for or against the mine. Thea Riofrancos (2020) expands on the social discord felt by communities impacted by mining activities through her fieldwork in Ecuador. She notes the tensions experienced by community members who began to suspect that their neighbors or

acquaintances may be supporters of the mine, leading to unsatiable encounters and frequent confrontations (Riofrancos, 2020). Warnaars and Bebbington (2014) further recount that everyday routines became shaped by mining ideology. With a divisive mining operation, it becomes socially advisable to "not be seen talking with your pro-mining neighbor, receiving milk from cattle that pasture on land owned by the mining company, or going to Sunday mass given by an anti-mining priest" (Warnaars and Bebbington, 2014: 120-1). In the context of heightened ideological tension exhibited in communities with a mining operation, even everyday acts can carry political meaning.

Mining conflicts can go far beyond implied threats of violence or neighborly suspicion, even escalating to full-scale armed aggression perpetuated by mine personnel and state military forces. As Ycaza (2019) illustrates in the example of the conflict over the San Carlos-Panantza copper mine in southern Ecuador, local opposition groups marched to burn down the company mining camp but were confronted en route by security forces where shots were fired. In the aftermath, one security officer was killed, which led to charges of trespassing and murder against the entire community. Consequently, the community was effectively disbanded by state security forces, who burned homes and businesses and relentlessly harassed suspected assailants, before the community was forced to flee. Though an extreme example of social discord, it is a frightening one nonetheless, again incited by tensions over mining activities.

IV. Gender inequity

Conflicts from mining can also generate gender inequities. In particular, mining can force unequal burdens upon women (Caxaj *et al.,* 2014; Jenkins, 2015, 2017; Lahiri-Dutt, 2011; Svampa, 2019; Vela-Almeida *et al.,* 2020; Velásquez, 2017). Such conflicts can emerge in the entrance of a male-dominated industry like mining into communities, which can lead women to experience increased sexual harassment or gender violence (Lahiri-Dutt, 2011; Svampa, 2019). However, women have a key role in resisting mining by openly engaging in activism and marches against the mine (Jenkins, 2015, 2017). Such expressions can conflict with traditional gender roles in rural communities where mining is likely to take place (Velásquez, 2017). Regardless, gender divisions become more pronounced in communities impacted by mining operations, leading women to situate themselves more prominently within anti-mining activities (Jenkins, 2015).

Though women can have outsize roles in anti-mining activism, they often go unrecognized as capable actors in mobilizing against extraction, as Jenkins (2015) elaborates. As a result, they form women-specific groups to increase their visibility as active proponents of anti-extractivism in resistance not only of the mine itself, but of marginalization that exists in the anti-mining movement. Jenkins asserts that making women more visible as anti-mining activists is necessary especially in the face of confrontational and aggressive tactics deployed by state responses to such resistances. By giving space for women to express and frame their activism in their own senses is particularly important to understanding the gendered natured of anti-mining activism (Jenkins, 2015).

Gender conflicts in anti-mining activism can also emerge along racialized lines. Velásquez (2017) has shown in an ethnographic study of mestiza women in the southern Ecuadorian Andes how women take active roles in anti-mining political activism. In these roles, the women have constructed identities as *defensoras* — a woman who defends land and water from both foreign and domestic mining projects. In this scenario, women resist the extractive routine of mining in addition to the sexist and folkloric view of rural *campesina* women present in some anti-extractive activist discourses. As Velásquez elaborates, the anti-mining activism of *defensoras* is grounded in speech as "radical refusals" to do away with the folkloricized view of rural women as silent, consenting subjects. Though the *defensoras* do not espouse representation of Indigenous identity, a mixed racial composition may restrain some women in their ability to articulate their participation within local resource conflicts (Velásquez, 2017).

CASE STUDY: SOCIO-ENVIRONMENTAL CONFLICT IN THE INTAG VALLEY

Stretching around 1,800 square kilometers across two of the world's most important biotic hotspots (About Intag, n.d.; Intag, Ecuador, n.d.), the Intag Valley has become widely recognized for its lengthy history of environmental defense and staunch anti-mining activism (Zorrilla, 2018). Much of the mining conflict in the Intag Valley occurred before Correa became President, particularly during a period of protracted political instability that lasted from the late 1990s to Correa's inauguration in 2007.

Located in the northern Ecuadorian province of Imbabura in the canton of Cotacachi, the Intag Valley comprises 7 parishes with a population of 11,502 (2010

Figure 1 (*above*): The location of the Intag region within the Imbabura province. Image credit: García and Chuquimarca, 2014

census).[1] Situated on the biodiverse western slopes of the Andean cloud forest belt, the subtropical region encompasses a system of mountainous riverine valleys with elevations ranging from 1,800 to 2,800 m (6,000 to 9,000 ft). Small and medium-scale agriculture provides the livelihoods for most of the local *colono* (settler) inhabitants sparsely scattered amongst cloud forest and agricultural lands. To the north, the Intag Valley overlaps with the Cotacachi-Cayapas Ecological Reserve, a protected area of considerable ecological importance because if safeguards one of Ecuador's few remaining coastal rainforest systems. The Intag zone itself hosts the Intag Cloud Forest Reserve, a private legally protected forest reserve home to wide numbers of endemic bird, plant, and animal species.

A History of Conflict and Confrontation

Even with the vast amount of natural environmental wealth above the surface of Intag, it is the mineral wealth that lies below it which has attracted intense

domestic and multinational mining interest to the region. Intag's prospects as a potentially productive mining site were first established in 1987, when a cohort of Ecuadorian and Belgian geologists identified an extensive copper deposit running above the remote enclave of Junín in the parish of García Moreno (Kneas, 2016). In 1991, after market-oriented reforms were enacted to Ecuador's mining laws, the Japanese firm Bishimetals (a subsidiary of the Mitsubishi corporation), with financial support from the Japanese International Cooperation Agency (JICA), commenced further mineral exploration in the Intag Valley (Avcı and Fernández-Salvador, 2016; Kneas, 2016).

Over six years of exploration and after 30 boreholes had been drilled, Bishimetals estimated the Junín deposit to contain 319 million tons of copper ore with a purity grade of 0.71%, resulting in an estimated total output of 4.5 billion pounds of copper (Kneas, 2016). The Environmental Impact Study (EIS) for the project was published by JICA in 1996 and noted the potential impacts from the proposed open pit mine needed to extract the ore. It forecasted the relocation of over 100 families from 4 communities along with the creation of a large mining town, extensive deforestation, contamination of water sources, desertification, increased crime and traffic, and loss of habitat in both the proximate region and in the Cotacachi-Cayapas Ecological Reserve (Zorrilla, 2018).

Local reactions to the EIS were furious and resulted in the burning of Bishimetals' mining camp in 1997 (Zorrilla, 2018). Soon afterwards, the company pulled out of the project and left the region. Throughout these events, anti-mining fervor in the local communities began to grow. Carlos Zorrilla, a Cuban national and

U.S. expatriate who has lived in the Intag Valley since the early 1970s, channeled this sentiment and co-founded the environmental group *Defensa y Conservación Ecológica de Intag* (Defense and Ecological Conservation of Intag; DECOIN) with local anti-mining priest Giovanni Paz. According to the organization's website, DECOIN seeks "to find ways to conserve the unique biodiversity in the Intag area" through efforts in direct conservation, sustainable development, environmental education, and providing legal remedies to biodiversity loss (Zorrilla, 2010).

Upon the departure of Bishimetals from the region, the residents of Intag posted a sign near the entrance to the community declaring that their territory will be forever free of mining (Kuecker, 2007; Rogge, 2008). Subsequently, the government of the Cotacachi canton delivered an ordinance assigning Intag the designation as an "ecological county" (Zorrilla, 2018). Indeed, no new mining interest appeared in the region until August 15, 2002, when the Ministry of Energy and Mines (MEM) auctioned off the Junín mineral concession to Ecuadorian mining speculator Roque Bustamante. The mayor of Cotacachi, parish governments, and Intag residents subsequently brought lawsuits against the MEM, citing the right to prior consultation regarding socially and naturally impactful activities, as was stipulated in the 1998 Ecuadorian Constitution (Zorrilla, 2018).[2] Amidst these lawsuits, Bustamente sold his share of the Junín concession to Ascendant Copper, at the time a Canadian junior mining company based out of Vancouver, British Columbia (Ascendant has since renamed itself Copper Mesa Mining Corporation).[3]

By 2004, Ascendant had fully acquired rights to the Junín concession. The company faced stiff resistance from the community after their poor experience with

Bishimetals. As a junior mining company, in addition to assessing the economic viability of the Junín copper deposit, Ascendant had to garner the support of the community in order to convince major investors. To do so, the company worked to establish community development programs, provide employment opportunities, and proposed local infrastructure projects, such as building roads, hospitals, and schools (Kuecker, 2007; Zorrilla, 2018). Though the majority of the *campesinos* (peasant farmers) in Junín did not possess legal titles to their land and initially opposed the mine, many were swayed to support the project by Ascendant's promises of the future socio-economic benefits that mining could bring (Avcı and Fernández-Salvador, 2016; Cisneros, 2011). This strategy did not have the desired effect, though, as years of community engagement initiatives ultimately led to little progress in establishing positive relations with the residents (Kneas, 2016).

Facing plummeting stock share prices and mounting investor pressure, Ascendant subsequently took drastic measures to enter the mining concession. On the morning of December 01, 2006, a group of Ascendant-sponsored paramilitaries contracted from former police, private security, and ex-military members confronted locals at a roadblock set up near the entrance to Junín. After a tense verbal exchange, the locals refused to let the paramilitaries pass through to enter the community and install a mining camp. In response, several paramilitaries began to spray tear gas and fire live bullet rounds at the unarmed community members, forcing them to disperse. This confrontation was viscerally recorded in Malcolm Rogge's internationally acclaimed 2008 documentary on Junín's struggles against mining, "*Under Rich Earth/Bajo Suelos Ricos*."

The following morning, a group of locals sought out and surprised the paramilitaries in their base camp in the forests above the village. They escorted the men, numbering 56 in total, back into town, confiscated their weapons, recorded their identifications, and subsequently detained them for the next week in the local church. The community members then called a press conference for the national media to come to Junín and document the situation. While detained, the paramilitaries each gave conflicting accounts as to what they were hired to do and who employed them; some could not even recall a company name at all (Rogge, 2008). During this time, Ascendant released a statement calling the squad a group of "agricultural experts" who were sent to establish an "ecological conservation area and to develop sustainable activities as part of an overall community development plan" (cf. Kneas, 2016: 81). Not surprisingly, the statement fell flat in trying to rectify the situation with community members and only served to draw increased national and international scrutiny to the mining conflict in Intag (Kneas, 2016; Rogge, 2008).

The ensuing media spectacle reached the levels of the national government to the point that the Environmental Secretary of the MEM was dispatched to Junín to assess the situation. While there, she delivered a communiqué on behalf of the residents of Intag to the acting manager of Ascendant Copper declaring that the company halt any current mining activity in the region until an EIS had been approved. In the same statement, the Environmental Secretary proclaimed that, under her authority, the current EIS from Ascendant had been rejected. After the declaration, the company allegedly maintained connections in the area and continued to hire local farmers in the area to continue derivative exploration work (Rogge,

2008). However, the entire confrontation reflected badly on Ascendant, leading them to reduce their presence in the region and eventually leave the Intag Valley in entirety by the end of 2008.[4]

The Mining Mandate

The events in Junín also ignited a national debate on the perils of mining. In April 2008, the Ecuadorian Constituent Assembly approved the Mining Mandate, a legislative act which revoked without compensation all undeveloped mineral concessions in the country, restricted further mining-related activity until a new constitution was approved, and created a state-owned mining company (cf. Riofrancos, 2020: 52). Though the mandate was seen by proponents as bringing more regulations to the rapidly expanding mining sector, it did not explicitly oppose mining, critiquing the industry instead as in need of reform (Riofrancos, 2020). Anti-mining groups were quick to seize on this apparent state promotion of mining and mineral extraction.

Acción Ecológica, an activist environmental group based in Quito, decried the Mandate as "counterproductive" and "conducive to the momentum of mining in the country" (Acción Ecológica, 2008). The group also criticized the constitutionality of the 2009 Mining Law, which sought to allocate portions of mining revenues to directly affected communities, stating: "None of the rights of Indigenous nationalities, peasants, or any other community inserted into socio-environmental conflict [...] will be justifiable under the existing model of Ecuadorian constitutional justice" (Acción Ecológica, 2014). As Riofrancos (2020) has coherently elaborated, the oppositional

response to mining in Ecuador would evolve to resolutely reject extraction to counter the state and corporate interests determined to further it.

Though the Mining Mandate was denounced by anti-extractive activists for not going far enough to prevent mining in the country, the debates that spurred its legislation were influential in creating a groundbreaking chapter in the 2008 constitution that granted rights to nature (Riofrancos, 2020). The inclusion of this chapter made Ecuador the first country in the world to afford constitutional rights to nature. The chapter's articles asserted that nature and ecosystems have the right to exist and flourish; to be restored in the event of severe or permanent environmental impact; and be subject to protection from potentially environmentally destructive activities (PDBA, 2008). Importantly, the chapter essentially gave the environment legal standing. People now had the right to coexist in harmony with nature and could petition on its behalf if they believed its rights were being violated. With this legally unprecedented chapter, disputes over natural resource extraction, such as with the mining conflict in Intag, can be understood as a contradiction between the constitutionality of the "rights of nature" and natural resource development initiatives (Acosta, 2016; Akchurin, 2015).

Future Perils

While mining in the Intag Valley was halted under the ordinances of the Mining Mandate and an unprecedented national coalescence of anti-mining fervor, only a few years passed before the region faced new pressures to allow mining. But this time, the pressures were both foreign and domestic. In 2012, ENAMI, the state-owned mining company created from the Mandate, partnered with Chilean mining behemoth

Codelco (the world's largest copper producer) to take control of the Junín concession. Seemingly taking a page directly out of Ascendant's playbook, ENAMI-Codelco began a self-ingratiating spending campaign to win over the residents of Intag before, in a 2014 incident, police forces broke through a community blockade so employees could enter and survey the concession. Throughout this time, community members faced threats of violence and indiscriminate arrests, leading international human rights groups to get involved (Zorrilla, 2018).

Though Intag was delivered a temporary victory with the passage of the Mining Mandate, the declaration's contradictory language essentially promoting mining activity dampened hopes of a "mine-free" future. Even with the past success the region has found in keeping large-scale mining at bay, the threat of extraction continues to linger over it. In June 2019, the Ecuadorian Constitutional Court formally ruled to forgo community consultation over the massive Cascabel copper-gold-silver project (*Reuters*, 2019). Located just 60 km (~37 mi) to the north of the Junín concession in the Intag Valley, Australia's SolGold mining company will attempt to develop the Alpala mineral deposit, of which Ecuador's Energy Ministry proclaimed, "could become the largest underground silver mine, third-largest gold and sixth-largest copper in the world" (*Mining.com*, 2020).**[5]**

Now I will turn to apply the previously delineated concepts of socio-environmental conflict with specific application for the Intag Valley. The structure will first consider the categories of territorial dispossession and environmental disharmony from mining in the region before considering the dynamics of social discord and gender inequities.

I. Territorial dispossession

The Intag Valley has endured numerous attempts by mining interest to get at its valuable subsoil. Though the state-owned company ENAMI is gaining more ground in the region, it is being done in partnerships with private foreign firms, such as Chile's Codelco and Canada's Cornerstone Resources. In addition to these companies, Anglo-Australian mining giant BHP and Australia's own Sunstone Metals are also spreading out across concessions in the region that border or overlap with legally protected forest reserves (see fig. 2).

From the size and extensiveness of the mineral concessions, especially in the recommendations for using large open pit mining techniques, relocation of people and dispossession of territory seems a foregone conclusion. Indeed, the first EIS of the Junín concession produced by Bishimetals admitted the necessary relocation of over 100 families from 4 communities (cf. Zorrilla, 2018). Ascendant, meanwhile, in their encounters with the community, steered away from topics of relocation, and instead sought to promote themselves as a community-focused company primarily concerned with Intag's conservation and development (Kneas, 2016). Once ENAMI took over the concession with Codelco, issues of socio-environmental conflict remained. However, a report prepared for ENAMI by management consulting firm Entrix Américas S.A. (EASA) evaluating the Junín deposit (called the Llurimagua mining area) categorized land conflicts and community fragmentation during the construction phase of the mining project as "irrelevant" (EASA, 2018: Impactos Ambientales 27). As the company explains, a socio-environmental impact deemed "irrelevant" will have a relatively minor impact on the project and can be resolved

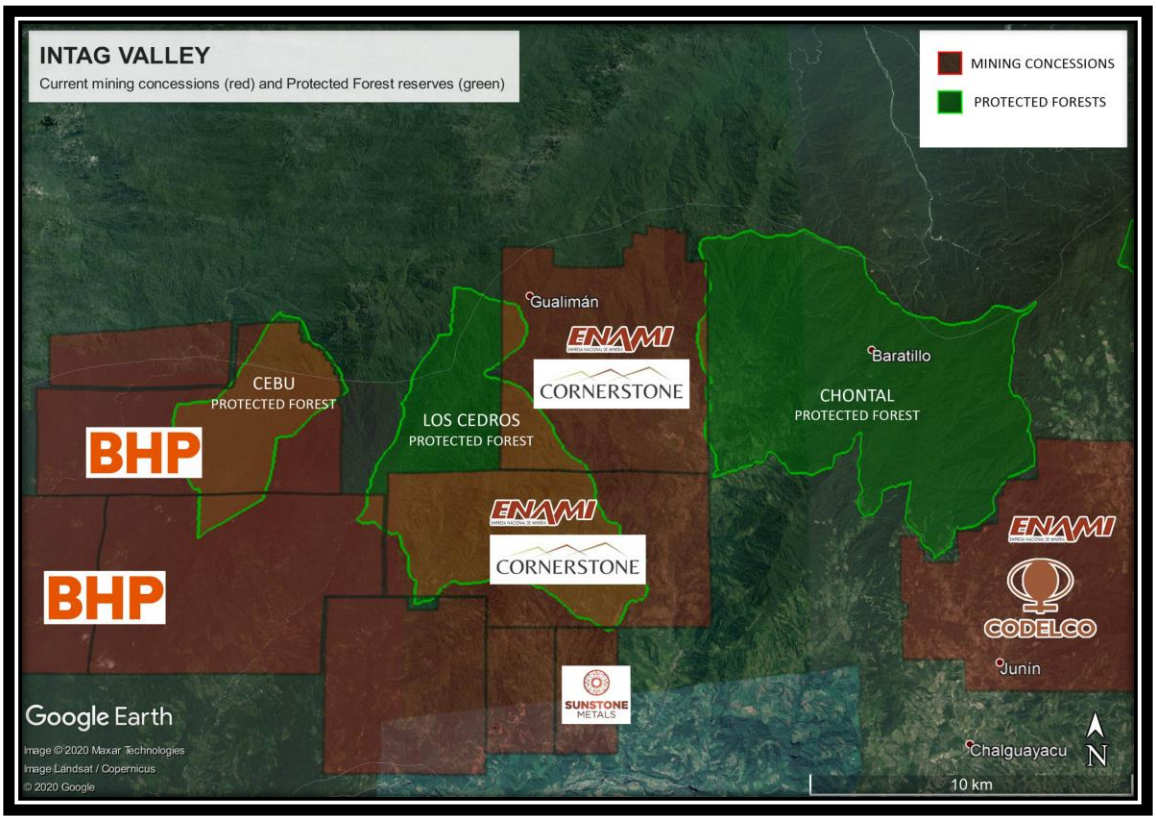

Figure 2 (*above*): A map of mining concessions (red) and their respective owners in and around protected forest reserves (green) within the Intag Valley. Image credit: Rainforest Action Group, 2020

with the application of standing policy or through other administrative channels.[6]

In resisting territorial dispossession, the communities of Intag have made gains in legally registering property titles to landowners to block land grabs from mining companies (Kneas, 2016). The local conservation group DECOIN along with other regional and international environmental organizations filled a crucial early role in warning residents about the encroachment of mining. (Zorrilla, 2010). It can be said that the strong community organizing strategies of these groups have blunted the successive attempts of Bishimetals, Ascendant, and later companies to get at the subsoil of Intag. In this work, limiting territorial dispossession could not come

without adequately preparing and educating residents for how and why they should defend their land from mining.

II. Environmental Disharmony

Mining in the Intag Valley would invariably threaten an internationally renowned biotic hotspot. Consequently, defense of natural terrains and connections to the landscape take on much deeper implications. In the struggle to counter mining, residents of Intag cannot merely differentiate the protection of territory from the protection of the natural environment. As Bebbington *et al*. (2008) have collated, anti-mining social movements in Intag did not necessarily frame mining in strict terms of dispossession or colonization; rather, by allowing mining to proceed, residents would be gradually dispossessed of their landscape and pre-mining lifestyle. In this sense, the physical-spatial conflict created by mineral extraction in Intag would also interrupt the cultural ties residents have developed with the area.

With subsoil interest in Intag providing a continual draw to mining companies, the region's many protected forest reserves are coming under ever intensifying pressure (as shown in fig. 2). Data collected from Roy *et al*. (2018) shows that mining in the Intag area would threaten a large number of endangered, vulnerable, and threatened species, several of which are endemic. Expanding mining and mineral concessions further into the protected forest reserves would also eliminate a key source of sustainable income for local people associated with the ecotourism sector.

Over the lengthy history of Intag's resistance to mining, articulations of threats to land, livelihoods, nature, and culture have become increasingly communicated in the region. These articulations have presented themselves in various forms of claim-

making regarding environmental and territorial knowledge, as Buchanan (2013) has analyzed. With these claims, contrasting "discourse coalitions" have emerged in Intag where the environment becomes an inflection point that differentiates *mineros* (miners) from *ecologistas* (ecologists) (Buchanan, 2013: 21). Whereas the *minero* discourse seeks to protect mining from "misinformation," the *ecologista* discourse puts much more on the line than the sole conservation of the region's unique biodiversity: the survival of the region's inhabitants themselves (Buchanan, 2013).

III. Social discord

Resistance to mining in the Intag Valley has rarely managed to maintain complete consensus throughout the communities. Certain disagreements over how and whether to revolt against mining companies and pro-mining interests have inevitably created further socio-environmental conflict. Though the project proposals from Bishimetals, Ascendant, and now ENAMI-Codelco have encountered stiff opposition from most of the community, pro-mining sentiments still simmered — sometimes resulting in violent clashes with opponents.

The divide between pro- and anti-mining groups in Intag became rather pronounced with Ascendant's operations in the region. Though facing an uphill battle to secure community support after the poor experience with Bishimetals, the company still took considerable efforts to establish a positive presence. By creating expectations for future employment, community development opportunities, and even environmental conservation, polarizing rifts in the community emerged (Avcı and Fernández-Salvador, 2016; Kneas, 2016). Ascendant flouted its financial capital and corporate connections that would seemingly allow the community to make

material gains in its own priorities. In order to build its financial capacity, Ascendant had to first stimulate investment with appearances of superb mineral deposits in the concession, even though its estimates were exaggerated (Kneas, 2016).

The promises of the company led to a particularly violent encounter between opponents and supporters after the paramilitary fiasco in Junín in December 2006. As Rogge (2008) documented, after the paramilitaries had been released and Ascendant publicly denounced by the Ecuadorian government, the town's anti-mining leader and other community members were viciously attacked in an attempted kidnapping by pro-mining individuals, leading to severe injuries. Such an episode was not uncommon in Intag throughout Ascendant's presence, revealing that social discord in the communities hinged greatly on the tensions created by the prospects of mining in the region.

IV. Gender inequities

Anti-mining sentiment in Intag highlighted some specific concerns regarding gendered impacts on local women. In one instance, the entrance of mining companies with majority-male workforces would raise instances of conflict with local women who might experience sexual harassment and greater social vulnerability (Billo, 2020; see also Lahiri-Dutt, 2011). Additionally, the resulting ecological impacts from mining in Intag would have a disproportionate impact on the household activities and economic ventures of local women (D'Amico, 2012). Water used for cooking, cleaning, and washing clothes would be subject to diminished quality and even outright contamination; soil infertility from land degradation would jeopardize the *cabuya* (agave), a fleshy plant common within the Intag Valley that yields fiber used in the

crafting of mats and other textiles (D'Amico, 2012). Throughout discussions over the potential impacts of mining in the Intag Valley, local women sought to break traditional gender and cultural roles to highlight the multidimensional effects of mining (Billo, 2020; D'Amico, 2012).

Similar to the examples of women's anti-mining activism articulated by Jenkins (2015, 2017) elsewhere in the Andes, women in Intag seized on their gender as a point of political agency against state-led extractivist proposals. As Billo (2020) has documented, women in Intag legitimized their role as anti-mining activists while combating unequal gender impacts inflicted by mining in the region. In doing so, women in Intag drew linkages to mining as a symbol of state-led paternalism that sought to reinforce the capitalist tendencies of extraction. By deciding to step up to counter pro-mining interests, women in Intag also had to deal with patriarchal suppression of their activism within their own communities (Billo, 2020). Women in Intag also utilized their traditional gender roles to prove to the Ecuadorian state that economic alternatives to mining were possible. This involved the creation of all-women's handicraft groups and involvement in community-run ecotourism projects and biodiversity conservation organizations (D'Amico, 2012).

DISCUSSION

By successfully repelling large-scale mineral extraction in the region on several occasions, it might seem that Intag is different in some way. The reality is that the community has maintained a strong resolve to defend its land and livelihoods from inevitable changes brought by mining operations. In doing so, the residents of Intag have been the subjects of public scorn from the highest levels of the Ecuadorian

government. To Rafael Correa, anti-mining activists anywhere were seen as troublemakers, who by resisting mining were resisting their own community development (Riofrancos, 2020; see also Vela-Almeida *et al*., 2018). In their efforts to resist the advancement of mining into their communities, the people of Intag presented a threat to Correa's priority to develop large-scale mining in the country. By deriding anti-mining activists, including many public threats made against Carlos Zorrilla, the co-founder of DECOIN, Correa made it clear that the staying power of the central government will not be challenged in any way, shape, or form.

The ongoing processes of resistance to mining and its socio-environmental impacts in the Intag Valley are part of Ecuador's longer experience with natural resource extraction. It also has many similarities with other communities locked in parallel struggles. The most pertinent example in a national context is that of the continual socio-environmental conflicts surrounding the development of large-scale mining in the southern Ecuadorian Amazon. As Avcı and Fernández-Salvador (2016: 920) conclude, Intag has managed to keep out large-scale mining due to the construction and continual evolution of a "territory-based" anti-mining identity. The region's inhabitants have also been successful in establishing viable economic alternatives through a mix of organic coffee and cacao production and ecotourism opportunities. In contrast, the Indigenous Shuar communities of the southern Amazon have dispersed resistance into a more individualized format that has been less effective in establishing a communal anti-mining vision like that of Intag (Avcı and Fernández-Salvador, 2016).

Intag's experience with mining is also different from other parts of the world

where extraction takes place. Due to certain locally specific interconnections between territory, cultural traditions, and livelihood in the Intag Valley, resistance to mining has become second nature. In fact, it serves as a source of pride and inspiration to community members cognizant of the continual encroachment of mineral extraction (Zorrilla, 2018). The fight against mining and associated socio-environmental conflicts in Intag have also benefitted from global networks. Without the partnerships and communications between DECOIN and international human rights and environmental organizations, greater awareness, and support for Intag's struggle would generally be lacking.

Debates around resource extraction in Ecuador have also frequently rotated around broader disagreements of national development models (Weber, 2011). Since primary-commodity extraction has factored heavily into Ecuador's political and economic development, perceptions of natural resources rank high in the gaze of national importance (Correa, 2012; Davidov, 2013). But with Intag's staunch anti-mining agenda, state and foreign mining companies have either been forced to or found it outright less costly to explore and develop more easily accessible mining concessions. As a result, it should be considered if the resistance to mining in the Intag Valley will instead force new territories of extraction out of other parts of the country, especially from the southern Andean and Amazon region. This point deserves special attention given the new political path Ecuador appears to be heading down.

Currently, as recent election results show, the victory of conservative former banker Guillermo Lasso over Andrés Arauz (Rafael Correa's handpicked candidate), suggests that the era of Correa and "Twenty-First Century Socialism" is perhaps

drawing to a close in Ecuador. Lasso has promised to guide a national economy struggling to rebound from the adverse impacts of the global pandemic by promoting a pro-business atmosphere within the country. As for the mining industry, Lasso has does not consider himself as being against mining but has publicly supported banning open-pit mining near water sources (Jamasmie, 2021). However, the caveat is that he has also pledged to further cultivate foreign investment in the country's mining and oil sectors. This stance appears to indicate that foreign and multinational companies will continue to be included in future phases of natural resource extraction in Ecuador.

CONCLUSION

This thesis has demonstrated that mining can create several forms of socio-environmental conflict. Socio-environmental conflict from mining has been defined as here conflicts in relation to spatial and territorial dispossession, interruptions to environmental harmony, intracommunity social discord, and disproportionately gendered inequities on women.

Territorial dispossession has occurred in the physical removal and relocation of communities and flora and fauna from sites of mineral interest. Environmental disharmony has been the result of the inherent requirement of large-scale mining, especially of the open-pit variety, that endanger endemic flora and fauna and force sometimes irreversible changes into the local landscapes. Social discord has played out in communities polarized by pro- and anti-mining sentiments. Gender inequities on women are the consequence of the way in which the male-dominated mining industry enters communities and reinforces patriarchal and paternalistic structures.

These elements of socio-environmental conflict have manifested in the various communities of the Intag Valley in response to the operationalization of large-scale mineral mining by foreign, multinational, and state companies. All told, the region has been successful in organizing resistance to mining through robust strategic planning, collective organizing, and communal development of a collective anti-mining identity.

As the Ecuadorian state pushes forward on its path to develop a large-scale mining sector, instances of socio-environmental conflict are likely to increase and grow more violent. The transition from petrostate to so-called mining state may be questionable in the way that neoliberal and extractivist policy agendas are reinforced. But given the fact that Ecuador appears committed to advancing its industrial mineral sector, especially now under a foreign investment-friendly president, mitigating socio-environmental conflict should take policy priority. Simple acknowledgement of potential socio-environmental conflicts arising from mining operations is not enough to effectively limit their impact. To mitigate socio-environmental conflict in mining projects will require extensive evaluation of impacts to the localized mining area as well as sites further afield. Genuine and continuous engagement with locally affected community members and representative organizations should be included in project proposals and fully written into environmental impact studies.

In the Intag Valley, mineral interest and anti-mining activism have become an indelible part of the local landscape. Faced with the unrelenting pressures of mineral abundance, private corporate investment, and pro-extraction presidents, the residents of Intag have been unmatched in their defense against mining. Just as with a mining project anywhere, socio-environmental conflict has emerged in various

forms within the region. It is yet to be determined if the community will add to their success against present and future mining projects, but its internationally renowned anti-extractive activism will be irremovable from the landscape. The strategies and coalitions that have emerged from Intag's continued success can provide a roadmap for other communities who will confront mining and other extractive projects.

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NOTES

Introduction: Ecuadorian Mining in Context

[1] Correa served 3 consecutive terms in office, a relative rarity for the presidency of Ecuador which has historically been marked by periods of instability. After leaving office in 2017, however, Correa — who had been living in exile in Belgium —has since been brought up on charges of bribery and corruption and sentenced *in absentia* by an Ecuadorian court to 8 years in prison (Uria, 2020). In September 2020, a three-judge panel upheld the original conviction and struck down appeals from Correa and 15 other defendants over the bribery scheme. Requests to extradite Correa from Belgium have also been rejected by Interpol based on the political rather than criminal nature of the charges (*Cuenca High Life*, 2020).

[2] Though not directly translatable to English, *extractivismo* is useful as a descriptive or analytical term that captures the multiplicities of resource extraction, including its promoting ideologies and resulting socio-environmental impacts. For an example of the term's versatility in describing extractive industries, see Veltmeyer (2013). For a contrasting evaluation of *extractivismo* as an "emic" discourse used to articulate activist and intellectual critiques regarding resource politics, see Riofrancos (2020) and Svampa (2019) respectively.

The Political Economy of Natural Resource Extraction in Ecuador

[1] I owe this point to one of my faculty readers, Professor Denise Humphreys Bebbington, who first made me aware of this factor in a note on a draft of my work submitted for revisions.

[2] Original quote: "recuperar la patria" […] "salir de la larga noche neoliberal." Speech delivered Sunday, Nov. 26, 2006, in Guayaquil, Ecuador.

[3] An economist by training like Correa, Acosta would come to be a prominent political and intellectual ally of grassroots anti-extractive activists. As the Constituent Assembly president, Acosta had been critical of large-scale mining in Ecuador before resigning from the administration a month before the country approved a new constitution in 2008.

Case Study: Socio-Environmental Conflict in the Intag Valley

[1] In Ecuador, parishes are the third level of government under cantons and then provinces. The Cotacachi canton is geographically divided by the Andean belt between the more urban eastern sector and the rural western sector that makes up the Intag Valley. The parishes to be referenced as the Intag Valley in

the case study are those of Apuela, García Moreno, Vacas Galindo, Peñaherrera, Cuellaje, Plaza Gutiérrez, and Selva Alegre. Population data for the Intag was compiled in Avcı and Fernández-Salvador (2016). Ecuador conducted a national census in 2020 but preliminary data was not yet available at the time of writing due to recording delays from the global pandemic.

[2] Ecuador approved a new constitution in 2008 after the election of Rafael Correa. The new constitution was drafted under a directive from Correa who made good on a campaign promise to hold a referendum vote on the 1998 constitution which had been criticized for opening up the country to neoliberal policies. A key debate over the new constitution involved whether prior community *consent* or *consultation* should be included. Ultimately, the articles of prior community consultation were applied to the new constitution.

[3] The company changed its name in July of 2008. In the parlance of the global mining industry, a "junior" mining company is one whose principal objective is subsoil resource exploration rather than full-scale extraction. This is particularly the case of "greenfield" sites where there has been little to no prior mineral extraction activities, as was the scenario with Intag and Ecuador to a broader extent (Kneas, 2016).

[4] After the nullification of Ascendant's EIS for the Junín project — and in the wake of the 2008 mining moratorium — the company sued the Ecuadorian government and filed for international arbitration. A March 2016 ruling by the Permanent Court of Arbitration in The Hague, Netherlands, subsequently awarded Copper Mesa Mining (formerly Ascendant Copper) a total of USD $25.1 million in damages including pre- and post- award interest. However, by August 2018, Copper Mesa and the Ecuadorian government agreed to a final settlement of USD $20 million and to withdraw all pending litigation to avoid further costs of enforcement (Lazenby, 2018).

[5] In a promotional report to investors, the Ministry of Mining ranked Cascabel 6th on a list of the country's 17 major mineral discoveries currently in exploration or development phases (Ecuador Catálogo Minero, 2018). According to the report, the mine has not yet advanced sufficiently to qualify as a "strategic project"; such a designation would avail further resources, support, and emphasis from the Ecuadorian government. The Ecuador Mining Catalog also lists that the top 5 mineral deposits ranked ahead of the Cascabel mine are mostly clustered in Ecuador's southern sierra and Amazon region with all having achieved "strategic project" status. The projects are, in descending ranking order, San Carlos Panantza in Morona-Santiago, Loma Larga and Rio Blanco in Azuay, and Fruta del Norte and Mirador in Zamora-

Chincipe. Due to the scale and intensity of mineral extraction at each of these sites, socio-environmental conflict and opposition from Indigenous and environmental groups has been profound and increasingly violent.

[6] The report identifies several other potential instances of socio-environmental conflict from the Llurimagua mining project: such as concerns to potable water quality; increased respiratory problems from dust and air contaminants; vehicle collisions from higher traffic frequency; deterioration of existing roadways; and noise pollution. In terms of territorial conflicts, the report mentions disagreements over land-rent contracts and speculation over estate values. Interestingly, many of these potential conflicts are given low rankings under the report's categorical values of relevance. Curiously, the report identifies the most "severe" socio-environmental impact of the project as the "generation of expectations in the population" (EASA, 2018). This could be in reference to Intag's propensity for resisting past mining projects.

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