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EDITORIAL

LARGE-SCALE MINING AND SOCIAL CONFLICTS: ANALYSIS OF SOUTHERN ECUADOR

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Abstract

This research analyzes how the mining law has performed with respect to large-scale mining projects, looking at the Mirador project as a case study. Specifically, we delve into citizen participation and land tenure during the project execution phase. The information we use was taken from the literature, as well as from interviews given to the inhabitants of the zone directly influenced by the project, and semi-structured interviews with key informants and community leaders. The main results point to the existence of social conflicts and discontent among the settlers, as they seem not to be taken into account in decision-making processes.

Keywords: Mining; Mirador project; transnational companies; mining legislation; social conflicts.

INTRODUCTION

With the passage of time, mining has come to play an important role in economic growth and sustainable development in countries throughout the Latin America region. History shows that they have been the source of constant social struggles between indigenous movements and the representatives of multinational companies and government authorities in an effort for the former to claim their legitimate rights, including the right to free and informed citizen participation,² the guarantee of land tenure,³ and the right to self-definition as indigenous peoples and nations, which, pursuant to International Labor Organization (ILO) Convention 169,⁴ guarantees collective human rights before the presence of large-scale mining projects being carried out in the zones where they live (Rodríguez, 2008).

The mega-projects predicated on extracting and exploiting natural resources of mineral origin destroy agricultural production, bring about the destruction of the natural heritage belonging to communities in the form of adverse environmental impacts of all natures, and, consequently, change the earth's original landscape, and also pollute water sources (López and Eslava, 2011).

In Ecuador, the ongoing presence of multinational mining companies has brought natural resources to the center of the analysis table in both academic and social settings. Exploration and exploitation are done in an environment that fails to respect the rights and interests of the people living there, which has spurred such social problems as: evicting people from their homes, disagreement with community members due to ongoing environmental contamination, representatives from the multinational mining companies appropriating homes and lands, and more (CIDH, ⁵ 2013).

The social, economic, and environmental challenges entailed by mining amount to the dispossession of the nation, and governmental entities are hardly interested in fostering the free participation of people living in mining areas, which has led to complaints from the natives about the failure to respect their integrity, their land tenure, water contamination, and the environment, in general Cárdenas, 2013). On another note, communities are at a disadvantage when it comes to confronting the mining multinationals, because during negotiations with the government, their voices are not heard Patiño et al., 2012).

The importance of this research resides in analyzing how the mining law has performed on the mining project Mirador, which is currently being carried out by the company EcuaCorriente S.A., and which brings with it enormous economic, social, environmental, and political interests, as it is the largest project in Ecuador to date. Accordingly, we begin with a brief history of mining in Ecuador, followed by an analysis of the national and international legislative framework, and, finally, the opinion of the inhabitants and community leaders in the direct zone of influence.

A HISTORY OF MINING IN ECUADOR AND THE PRESENCE OF THECOMPANY ECUACORRIENTE S.A. (ECSA)

With the Mining Law of 1985, mining exploration and exploitation did not have a clear legal framework, because they were not carried out under any technical or specialized procedure. Later, the Mining Law of 1991 placed emphasis on small-scale mining, which could only be carried out legally in riverbeds, river beaches, or any other land where there were no mining rights already secured by a deed; it also stipulated that the State was to legalize those mining activities that would not bring about environmental harm, irrational exploitation, or waste of mining resources. In 2001, in Ecuador,

small-scale mining was designated as any activity developed by people whose monthly exploitation amount did not exceed "1,500 tons a month of ore or 50 tons a day of mineralized material" (Morejón, 2012) In 2011, the new Mining Law was enacted, and it is in that same year when the Trole II Law was approved, in an attempt to promote investment and citizen participation (Morejón, 2012).

Until that point in time, the only form of mining exploration known in Ecuador was small-scale; nevertheless, by the midnineties, the company BHP Billiton, hailing from Canada, discovered the first copper deposits in Mirador, in the district of Tundayme. In 2003, the mineral rights and mining concessions to the Mirador reserve were transferred to EcuaCorriente S.A., an Ecuadorian subsidiary of the Canadian junior company Corriente Resources, which was purchased in 2010 by the Chinese consortium China Railway Construction Corporation-Tongguan Investment, and which is composed of the Chinese business corporations Tongling Non-Ferrous Metals and China Railways Construction Corporation, both of which are major producers and refiners of metals in China (Álvarez, 2016; Arcom, 2015).

By 2006, EcuaCorriente S.A. had begun the purchase of lands belonging to the residents of San Marcos. In 2007, President Rafael Correo suspended exploration activities for various mining concessions, including the Mirador project, but even so, EcuaCorriente S.A. continued acquiring lands in the San Marcos area, with negotiating techniques including threats and pressure (Álvarez, 2011). The San Marcos community was just a neighborhood close to Tundayme, despite the fact that it was historically a territory belonging to various Shuar clans, founded in 1983 by the colonists. At present, its existence has come under fire as a result of a series of both forced and voluntary exiles of its residents (Álvarez, 2016).

The enactment of the New Mining Law of 2011 was followed by the approval of the Environmental Impact Assessment (EIA) for the Mirador project. As a result, the acquisition of lands from the San Marcos community began to multiply, and these purchases were made at much lower than market prices (Álvarez, 2016). On March 5, 2012, President Rafael Correa and Shao Wu, vice president of the Chinese company Tongling and representative of EcuaCorriente S.A., is signed the concession contract for the Mirador mining project (Ministerio Coordinador de Sectores Estratégicos, 2014; *La República*, 2015).

As such, Mirador became the first large-scale mining project in Ecuador, and despite the lack of prior consent from the inhabitants, governmental institutions have supported the company EcuaCorriente S.A. via a series of disloyal strategies, such as arrests, deception, and eviction. They have also proceeded similarly in other multinational mining projects (Álvarez, 2016).

THEORETICAL FRAMEWORK

From the neoclassical standpoint, growth in this analysis always came with a series of applications and possibilities tied to one single core: the market and market balance (Cataño, 2001). Authors like Solow (1956) emphasized, to give an example, three important aspects: 1) increased quality and amount of labor, 2) more capital, and 3) technology improvements (Sala-i-Martin, 1990). Accordingly, this conception of growth responds to different models that have sought to explain that the neoclassical model is the most complete and that which can best explain the economic reality (Cataño, 2001).

This approach does not really reflect the reality of peripheral countries, though, as technical progress has come faster to sectors like industry than to primary production (Prebisch, s.f.), whose productive structure has not yet fully consolidated, but which at the same time enjoys vast quantities of natural resources. In Latin American countries, development, both endogenous and exogenous, is bound up in the export of natural resources with little or no added value (Azamar and Ponce, 2015). Another dimension of this reality is the social factor, and the rural setting of the regions where these resources are mined.

According to the Latin America Mining Conflicts Observatory (2016), we are once again witnessing the return of a good amount of state-wielded and private violence in an endeavor to spatially shape the territories, which are being sacked and plundered, paving the way to large-scale mining. Sacher and Acosta (2012) felt that large-scale industrial mining in Ecuador finds its nexus in the reforms launched by the Washington Consensus platform, which meant, for example, a weak role for the State, tax benefits for companies, reduced tariffs, and more. In 2008, with a new policy and vision, the Mining Mandate—which set out to correct the challenges up to that point in time—returned the starring role to the state when it came to mining, promoting the importance of investing in large firms, but failing to develop at the same time a plan that would contain social, environmental, and local aspects of these territories (Sacher and Acosta, 2012, p. 16).

With that said, the dimension of the theoretical analysis of sustainability emerges in such activities as the exploitation of these resources, especially in such Amazonian regions in countries like Ecuador, Peru, and Brazil, to name a few, where the social reality still reflects community practices.

Pardo (2012) proposed a series of natural resource sustainability categories, ranging from very weak to very strong, measured by resource availability and replacement capacity. Very weak sustainability means that there is infinite substitution capacity between natural resources and artificial replacements created by human ingenuity. Nevertheless, Lewis Cecil Gray asserted that the problem of conservation is macroeconomic, tied to inter-generational equity, and drew a comparison between the future discount rate with respect to the current use of natural resources, finding an optimal point in the extraction of exhaustible resources (Ramos, 2002). For his part, Harold Hotelling, in *The Economics of Exhaustible Resources* (1931) defined an optimal exploitation rule, which entails comparing the profitability of the opportunity cost of exploiting the resource with the opportunity cost of leaving the capital immobilized (Ramírez and Arango, 2014). Later on, Stiglitz and Solow assume from the get-go limitations on growth, considering exhaustible

resources. Accordingly, technological change plays an important role in their replenishment. Stiglitz held that thinking about people's welfare implies that any measurement of economic production must necessarily include a gauge of sustainability (Hobson, 2013).

Strong sustainability restores the approach in which exhaustible resources are central to established systems, and to which any alteration or, even worse, depletion, would bring about negative consequences. Arias (2006) wrote that sustainability shall be much more affected if the replenishment capacity of the natural resources alters ecosystems and wildlife. In light of that situation, certain amounts of natural capital ought to be conserved, regardless of the opportunity cost of doing so. Authors like Turner (López, 2012) distinguish between the concept of strong and "very strong" by defining the latter as extreme environmentalism, in cases like the rights of nature, natural systems, and biodiversity.

Analyzing exhaustible resources, their exploitation, and their relationship with social interactions means establishing that strong sustainability must come first in order to guarantee that resources are generated that will initially benefit and minimize any changes that will necessarily influence the people and wildlife involved. Nevertheless, it is to be expected that capital, multinationals, and economic interests might make their way past the institutional barriers set up in the instruments guaranteeing the rights to nature.

More structured propositions concerning sustainability are found in Daly (1992) and Perace and Atkinson (1992), who discuss the concepts of weak and strong sustainability, while Turner (1993) separated the notion into very weak, weak, strong, and very strong. As such, strong sustainability is a theory that borrows its approach from the rationality of thermodynamics and ecology (Daly, 1992), assuming that there are vital functions in ecosystems that cannot be replaced under any circumstance by manufactured capital, and that these functions must be maintained so that economic growth can be sustainable (Dietz and Neumayer, 2007). Strong sustainability brings to bear a fundamentalist environmentalism, promoting the rights of nature and the preservation of natural systems and biodiversity, compatible with an economy in a steady state (Gallopin, 2003).

Very weak sustainability holds that natural and manufactured capital are perfectly interchangeable, and that there is no need to conserve natural capital (Gallopin, 2003), while weak sustainability emphasizes the value of protecting ecological and biochemical processes that once lost cannot be recovered, known as critical natural capital (Pearce and Atkinson, 1992; Turner, 1993). When weak sustainability is instrumentalized, attention revolves solely around exhaustible resources, and to achieve this, the Hartwick rule considers that it is possible to attain constant and infinite per capita consumption in a society via investment of the rents generated from extracting the non-renewable resource in manufactured capital (Hartwick, 1977).

Exploitation of exhaustible resources is directly tied to nature and the social and cultural aspects of human groups living in the zones adjacent to the exploitation area. Extraordinary gains—resulting from the sale of natural resources like ore, oil, and natural gas—save governments costly tax or distributive work, therefore underwriting their public spending (Andrade, 2015) and turn the states into rentier states, in the words of Dunning (2008), who refers to a State in which the rents provide a significant portion of government revenue.

Against that backdrop, rentier states function based on a legal framework regulating access to natural resources, profit distribution mechanisms, the behavior of the extractive industries, the stakeholders taking part in decision-making, management of the social and environmental externalities generated by the extractive industry (Andrade, 2015; Colier, 2010); this is known as natural resource governance, which to the Economic Commission for Latin America and the Caribbean (ECLAC), "consists of a country's sovereign policies and set of institutions that regulate the ownership, rent appropriation, and distribution of the productivity gains derived from their exploitation" (Cepal, 2013, p. 8). Conflicts among mining companies, social groups, and state authorities generally arise around prfit distribution, which according to Bebbington (2012), is of the utmost important to national and subnational political and economic change. Beyond social conflicts, there is also the irreversible degradation of the soil, water, and biodiversity to keep in mind.

On another note, the United Nations Development Programme (PNUD, 2015) approved 17 sustainable development goals as part of the 2030 Agenda, which have been considered to be of great importance to eradicating poverty and fighting for social justice. In this context, societies ought to engender the conditions needed for people to access quality jobs without harming the environment.

It is worth recognizing that institutions play an essential role in nations' economic performance. Notably, they have much to do with the distribution of wealth factors, as they set the rules that shape human activity in a society. Individuals and companies only invest when they are certain to obtain profits, regardless of the social and environmental repercussions involved, so the State's capacity to impose its authority throughout the territory becomes fundamental (Álvarez, 2016).

Because of its very nature of dealing with non-renewable resources, it could well be asserted that mining is not a sustainable activity, but its outputs do lay the groundwork upon which infrastructure is built for sustainable economic activity. Consequently, mining is frequently viewed as a guarantee of progress and sustainable development (Carrasco and Fernández, 2009).

LEGAL FRAMEWORK

ILO Convention 169 is entirely about indigenous and tribal peoples, and was signed into effect in Geneva, Switzerland in 1989. Article 7 establishes that citizens shall participate in developing, implementing, and evaluating projects. Likewise, the government are to convene any directly-affected peoples for consultation through appropriate procedures, via representative institutions (OIT, 2009).

With that said, bear in mind that the 2013-2017 National Plan for Good Living stipulates among its objectives the guarantee that ancestral lands shall be conserved (SENPLADES, 2013), and the right to citizen participation, as stated in the 2008 Constitution and in the Mining Law. The Constitution of the Republic of Ecaudor (2009) defines Sumak Kawsay as fostering the conditions for citizens to live in harmony alongside nature, a new form of society. It furthermore says in Article 71 that nature or the Pacha Mama is to be fully respected because it constitutes the very existence, maintenance, and regeneration of life cycles. Article 408 defines nature as:

The unalienable property of the State, immune from seizure and not subject to a statute of limitations. These assets can only be produced in strict compliance with the environmental principles set forth in the Constitution (*Constitución de la República del Ecuador*, 2008, p. 35).

Additionally, Article 407 prohibits the extraction of non-renewable resources from protected areas and zones that have been declared as intangible assets, including forestry production.

The 2011 Mining Law was an attempt to regulate matters pertaining to citizen participation and land tenure, establishing limitations and defining the possible types of mining contracts in Ecuador. Specifically, Articles 87, 89, and 90 state that the State shall be responsible for carrying out social engagement and consultation, departing from the principles of legitimacy and representativity, in order to include the opinion of the community through public institutions. These processes are designed to foster sustainable development in mining, respect for the environment, social participation in environmental affairs, and the development of towns or villages located inside the mining project zones of influence.

LAND TENURE

Mining regulations and laws in Ecuador date all the way back to the fourteenth century, but they have been amended over time with the decisions made by each administration. The latest iteration is the Mining Law enacted in 2011, at which point in time there were already 2,099 mining companies operating in the country; by 2016, the figure had ballooned to 4,393, of which 983 are mining concessions,⁷ spread out on 772,728 hectares of land occupied by multinationals, whose main objective is above all the exploitation of metals and ore to satisfy economic, social, and political interests, which has caused problems for the affected community members due to the lack of attention and interest from the central government and failure on the part of the mining companies to respect the communities, as they appropriated the lands via different forms, like "purchase and sale" from natives, benefiting only 30% of the population, while 70% have illegally come to possess their lands (Ministerio de la Minería, 2014).

Given this chaos, the national authorities have sought to solve any problems that arise, as local authorities—in partnership with community leaders—have filed complaint after complaint about the various problems that have emerged with mining companies.

Looking at land use, Chapter Four, "The Rights of Communities, Peoples, and Nationalities," of the *Constitution of the Republic of Ecuador* (2008) speaks about the value of communities having their voices heard in situations in which it is clear that their rights are being violated by other people or companies.

The Constitution of the Republic of Ecuador (2008) affirms that the priority of Good Living is to elevate the role of the State by preventing the privatization of public assets, which are sort of an insurance to be used by society in the face of social injustice and poverty, which in turn may result from activities related to the exploitation of non-renewable resources (mining, oil). No article of the Constitution proposes giving up on extractive activities altogether, except 407, which prohibits the extraction of non-renewable resources from protected areas or zones that have been designated intangible assets, including forestry production, unless there is a request made by the Presidency of the Republic with a well-founded rationale and the National Assembly has declared it to be in the national interest.

Aiming to shore up both the individual and collective interests involved in property rights, the Constitution contains Articles 57 and 60 on land tenure. Article 57 recognizes and guarantees to communes, communities, peoples, and indigenous nationals the right to hold onto possession of their ancestral lands and have these lands freely adjudicated to them, as well as not to be displaced to other lands. Article 60 identifies any communities owning lands collectively as an ancestral form of territorial organization.

The efforts exerted by peoples, communities, and indigenous groups living on these lands to conserve their territories have never been easy, and even less so in recent years, due to the presence of multinational firms whose sole objective is to exploit non-renewable resources in order to tap into economic gains, regardless of whether or not there is fallout for the environment or people living in the exploitation sector (INREDH, 2016).

The Agency for Mining Regulation and Control (ARCOM) affirms that "47 mining easements were processed and completed for the Mirador mining project, operated by the company EcuaCorriente S.A. (ECSA) in the San Marcos sector of the Tundayme district" (Ministerio de Minería, 2016).

Objective 1 of the National Plan for Good Living (2013-2017) establishes that the government's sole and main objective is to guarantee the rights of peoples and nationalities to the use of ancestral territories. Likewise, it says that the central government shall be responsible for setting the policies or mechanisms that ensure that the rights of peoples and nationalities to the use of their ancestral lands are respected.

Article 91 of the 2011 Mining I aw defines the right for classes of people to file complaints or report to the Ministry of the Environment any mining activities that generate social, environmental, or cultural impacts, even if territories are appropriated; moreover, the Mining Ministry is, pursuant to Article 117, to immediately suspend any contract between the mining multinational and the State if any human and environmental rights have been violated. Similarly, Articles 100-105

state that once a citizen agrees to the concession of a piece of land, if the citizen is not the owner of the land to which the mining rights were granted, an agreement ought to be sought with the legitimate owners of the land for the purchase or voluntary easement of it; if an arrangement cannot be reached, the concessionaire can ask for the easement from ARCOM.

Peoples and indigenous nationalities are protected by the rights guaranteed by international standards, the idea of which is to protect the territories. Under these conditions, evictions shall never be done by force, at night, or on holidays or religious festivals, as stipulated in Article 69 of the Basic Principles and Guidelines on Development-Based Evictions and Displacement, Annex I of the United Nations Report by the Special Rapporteur on Adequate Housing (ONU, 2014).

In terms of the Mirador project, of the 47 mining easement procedures, ⁸ 33 of the landowners voluntarily reached an economic agreement to change the use of their properties, but the other 14 had to go through the administrative easement formality. Given the owners' refusal to receive checks compensating them for their lands, the total compensation for the 14 owners amounted to 1,942,901 dollars (ARCOM, 2016).

In this sense, the Regional Foundation for Advising on Human Rights (INREDH) (2016) asserted that the legal representatives of EcuaCorriente S.A. essentially appropriated the lands, because the community leaders opted to defend their people, and some deaths resulted in the process (INREDH, 2015). According to Andrade (2016):

Although Ecuador is viewed, at least to outsiders, as a State on the cutting-edge when it comes to legal and environmental principles, by recognizing in its Constitution the rights of nature and by being a country that acknowledges the plurinationality of its inhabitants, in recent years, economic policies have promoted and driven the expansion of the extractive industry, which is an attack on the territorial and cultural integrity of diverse nationalities, as stated in a study by the Observatory of Mining Conflicts in Latin America (OCMAL).

The Mirador project is located in the district of Tundayme, in the Pangui canton, the province of Zamora Chinchipe, and is the largest in Ecuador. It is an open-pit, large-scale copper mining project stretching across approximately 2,985 hectares, including the mining operation area and the protection zones where there will be a 1.2-kilometer-wide pit. The concession has been given to the Chinese company EcuaCorriente S.A. The feasibility study claimed that once ore extraction is complete, efforts will be undertaken to improve the landscape for tourism purposes (Conaie, 2015).

The mining mega-project has a 30-year timeline that begins to run when the contract is signed, and some 6.5 billion tons of copper, 26 million ounces of silver, and 3.2 million ounces of gold⁹ will be mined (Ministerio de Minería, 2016). Annual production is forecast to be 208,800 tons of copper concentrate mined from an open-pit mine that will be at least 250 kilometers deep and 1.2 kilometers wide. Some 30,000 tons of rock shall be removed a day, and 140 liters of fresh water per second consumed (EcuaCorriente, 2010).

Mega-mining in Tundayme has been the source of all kinds of social, political, economic, and environmental problems, which have turn ushered in a series of conflicts between land-dwellers, authorities, and the employees of EcuaCorriente S.A. Most of the people living in Tundayme do not agree with the project, and have come right out and said that they disagree with the terms under which the lands were negotiated and they were pressured to sell.

Additionally, representatives of the company EcuaCorriente S.A., escorted by members of the police force and with the aid of backhoes, demolished the church and school in December 2014, which had been built by people living in San Marcos (Bayón and Japhy, 2015). Further to that, in December 2015, in the San Marcos neighborhood in Tundayme, in a special operation with heavy machinery and policy custody, 15 families were evicted from their homes, with the backing of officials from ARCOM (Bayón and Japhy, 2015).

In the mining project zone of influence, several of the land-owners have refused to sell their properties, in principle because they disagree with the amounts of money the mining company has offered them in exchange. In parallel to this situation, the water bodies that the people use to supply and consume water have been polluted.

The Confederation of Indigenous Nationalities of Ecuador (Conaie) and the Confederation of Indigenous Nationalities of the Ecuadorian Amazon (Confenaie) are watchdog groups that have come out in defense of the rights of the communities where negative impacts on society are happening as the result of mining mega-projects. The two organizations visited Nankints (Morona Santiago) to document the reality facing the *Shuar* people and other *mestizo* groups directly affected by mining, which spurred confrontations, displacements, and even military presence and other consequences affecting the integrity of the people living in the zone. In response, the government in power tried to ignore this reality and failed to recognize any responsibility (Villavicencio, 2014).

The community members' disagreement with the presence of mining multinationals is found not only in Ecuador, but also in other Latin American countries, like Bolivia, Peru, Colombia, and Brazil, where the conflicts happening between indigenous communities and governments, but above all, with mining multinationals are becoming more and more serious. Several mining concessions operate despite citizen opposition, paying no mind to it at all, and even in spite of legal determinations made by the central government ordering exploitation activities to be definitively halted, as is the case of the Madre de Dios project in Peru.

In Ecuador, when a mining zone is mined, it not only destroys the environment, but also leaves behind a smaller pool of both renewable and non-renewable resources for future generations, as a result of the poor use of the environment on the part of not only citizens themselves, but also the government administrations involved and hoping to get some economic benefit that they think will replenish the harm done. The Ecuador Chamber of Mining (CME, 2013) affirms that the mining potential in Ecuador in 2013 amounted to 217.6 billion dollars, which is to say, the country boasts reserves of 167.2 billion dollars in copper, 26.2 billion in molybdenum, 22.5 billion in gold, and 1.7 billion in silver.

In the Mirador project, the recurring issues have tended to revolve around the legalization of community lands and evictions of people living in the mining project zone of influence.

CITIZEN PARTICIPATION

On the same topic, ILO Convention 169 is important, as it establishes the right of citizens to be consulted on matters pertaining to legislative or administrative measures that could directly affect their peoples. Pursuant to Article 7, citizens are entitled to participate in the design, implementation, and evaluation of projects. The government must likewise convene for consultation any directly-affected peoples via appropriate procedures and representative institutions.

The National Plan for Good Living, overhauled in 2013 in order to guarantee citizen participation in the same way the *Constitution of the Republic of Ecuador* (2008) and Section 1.9 of the Mining Law do, lays the groundwork for regulations related to prior consultation and citizen participation for communities, peoples, and nationalities, for cases in which Stategranted permits or decisions could affect the environment.

In 2008, Article 57 of the Ecuadorian Constitution created the recognition of communities, peoples, and indigenous nationalities and guaranteed their entitlement to prior, free, and informed consultation about any projects involving the prospecting, exploitation, and marketing of non-renewable natural resources carried out on their lands. It likewise stipulates in Article 398 that any state-granted permit or decision that could affect the environment must undergo a consultation with the community via the various institutional mechanisms provided for by the government.

As a result of the foregoing, the mining easements in Tundayme are considered part of the collectively-owned lands of the Cóndor El Mirador mountain range, so they must undergo consultation. Nevertheless, neither any government authority nor the multinational company ever carried out this process and, as such, the easement process is unconstitutional (INREDH, 2015).

The Mining Law is rooted in the 2008 Constitution, containing several articles guaranteeing to the people the right to participate in any decision or proposal on any activity that will have a social or environmental impact on them. Thus, Article 87 says that the State shall be responsible for carrying out participation and social consultation processes in an effort to promote sustainable mining development, respect for the environment, social participation on environmental matters, and the development of the towns located inside the mining project areas of influence. Likewise, Article 89 stipulates citizen participation as a process whose purpose is to take into consideration and incorporate the opinion of the community into the social and environmental management involved in a given mining project. Similarly, Article 90 establishes that all citizen participation or consultation processes ought to be considered as compulsory and special procedures, beginning with the principles of legitimacy and representativity.

INREDH (2015) states that just as there have been myriad incidents on the issue of land tenure perpetrated by the mining multinationals, the problems also extend to the participation of peoples, communities, and indigenous groups. The governmental agencies' indifference toward the indigenous people's guaranteed and free right to access mining-related information—despite the Constitution's affirmation of the right in Article 398, especially with respect to property—has led to unrest when company representatives show up to take possession of lands, which in many cases are still being inhabited by the land-dwellers. Nevertheless, this is not the only citizen participation-related issue. Because people are not convened for consultations to share their opinions about whether or not they accept the implementation and execution of the mining company project, people living in the area are constantly protesting against the presence of the megaproject in the zone.

In some cases, the mega-mining projects, like the Mirador project, have failed to respect the law, as they are not fully compliant with legal regulations. In fact, 46% of the people living in the area assert that the mining laws were developed without their opinions, complaints, and suggestions, for both sectoral and central government-enacted regulations. The start-up phase for exploration in these mega-projects has now become one of the top drivers of the problems ailing the rural communities, with 42% of the population believing that this exploration is illegal and arbitrary. They were never invited to any sort of people's consultation, and there has been insufficient participation from the residents on the matter of land tenure, largely because governmental entities have expressed so little interest in carrying out effective citizen participation. Now, 58% of citizens feel that this weak citizen participation and the illegal appropriation of their lands by the multinationals will have a negative impact on the quality of life of future generations.

RESETTLEMENT OF RESIDENTS

Pursuant to information furnished by the Ministry of Mining, only a small percentage of families (12% of the total population) have been resettled (between 15 and 20 families), in compliance with an order issued by the Ministry of the Interior as required by law, while 88% continue to live in the zone (*Revista Clinica Ambiental*, 2012). Such is the case of the Uyahuari-Guamán family, which was resettled in the canton of El Pangui, while the Arévalo-Sánchez family asked for their belongings to be moved to the province of Morona Santiago, in the Gualaquiza canton, which was done (*El Telégrafo*, 2015).

According to López (2016):

The intervention was done peacefully, and there was no need for the progressive use of force. There were no arrests, and the citizens involved received medical care before they were moved to their new homes to make sure they were in an

adequate state of health. The concessionaire collaborated to hire private vehicles to move the dwellers with their belongings to the places they chose.

ENFORCING THE LAW DEPENDING ON WHO BENEFITS

Although countless amendments have been made to the mining regulations, the people involved in mining have not benefited whatsoever. Much to the contrary, these changes have only led to misinformation and concern among the citizenry, which in many cases have garnered some sort of response from the government leading to some degree of peace of mind. Even so, the only thing the dwellers have received are attacks from the policy and soldiers led by a group of people in the government (INREDH, 2016), which have resulted in loss of human life, people who were merely asking for the guarantees listed in the Constitution to be fulfilled: respect for the life of each and every Ecuadorian, regardless of their skin color, ethnicity, or race.

CONCLUSIONS AND RECOMMENDATIONS

In recent years, large-scale mining in Ecuador has become a matter of burgeoning interest, sparking social and political conflicts in which the administration in power, representatives of multinationals, community leaders, and people living in the large-scale mining project zones of influence are entangled. With Ecuador a "rentier" State, large-scale mining is seen as an alternative path to economic growth in the country. However, it is clear that the current laws are weakly enforced throughout every phase involved in large-scale mining projects.

There is a widespread unawareness of the reach of mining activities, which is the result of the limited information the central government representatives provide to local government leaders in the Tundayme district and to community leaders.

It is time to develop processes to communicate and raise awareness about current laws among the communities located in the mining project zones of influence.

It would be a good idea for the central government to set official land prices, depending on property size and productivity, so that when it comes time to acquire these lands, there would not be conflicts between the mining company—as buyer—and the locals—as sellers.

The Ministry of Mining, charged with executing public policy, ought to design mechanisms to enhance citizen participation so that communities are truly involved and can access the benefits provided for by law.

Another recommendation would be for mining companies to create opportunities to engage in dialogue, get to know the people living in the mining project zone of influence, and forge alliances before commencing operations. Moreover, developing true social responsibility in the communities is a pressing matter, so that companies can make a sustainable contribution to their economic, social, local, environmental, cultural, and professional development.

BIBLIOGRAPHY

- Agencia de Regulación y Control Minero (2014), Proyecto minero Fruta del Norte es uno de los mayores yacimientos de oro en el mundo, ARCOM. Recovered from: < http://www.controlminero.gob.ec/>
- _____ (2015), Proyecto minero Fruta del Norte invertirá USD 1.000 millones hasta el 2018, arcom. Recovered from: http://www.controlminero.gob.ec
- Álvarez, E. (2011), Análisis de la influencia de la actividad minera aurífera de pequeña escala en el desarrollo económico local de Zaruma y Portovelo. Recovered from: http://repositorio.acsoandes.edu.ec/bitstream/10469/74-55/2/TFLACSO-2011EVAM.pdf
- Álvarez, Y. (2016), Mongabay. Recovered from: <a href="https://es.mongabay.com/2016/01/proyecto-de-mina-de-cobre-a-gran-escala-en-ecuador-inmerso-en-denuncias-de-abuso/5;prices-a-gran-escala-en-ecuador-inmerso-en-denuncias-de-abuso/5;prices-a-gran-escala-en-ecuador-inmerso-en-denuncias-de-abuso/5;prices-a-gran-escala-en-ecuador-inmerso-en-denuncias-de-abuso/5;prices-a-gran-escala-en-ecuador-inmerso-en-denuncias-de-abuso/5;prices-a-gran-escala-en-ecuador-inmerso-en-denuncias-de-abuso/5;prices-a-gran-escala-en-ecuador-inmerso-en-denuncias-de-abuso/5;prices-a-gran-escala-en-ecuador-inmerso-en-denuncias-de-abuso/5;prices-a-gran-escala-en-ecuador-inmerso-en-denuncias-de-abuso/5;prices-a-gran-escala-en-ecuador-inmerso-en-denuncias-de-abuso/5;prices-a-gran-escala-en-ecuador-inmerso-en-denuncias-de-abuso/5;prices-a-gran-escala-en-ecuador-inmerso-en-denuncias-de-abuso/5;prices-a-gran-ecuador-inmerso-en-denuncias-de-abuso/5;prices-a-gran-ecuador-inmerso-en-denuncias-de-abuso/5;prices-a-gran-ecuador-inmerso-en-denuncias-de-abuso/5;prices-a-gran-ecuador-inmerso-en-denuncias-de-abuso/5;prices-a-gran-ecuador-inmerso-en-denuncias-de-abuso/5;prices-a-gran-ecuador-inmerso-en-de-abuso/5;prices-a-gran-ecuador-inmerso-en-de-abuso/5;prices-a-gran-ecuador-inmerso-en-de-abuso/5;prices-a-gran-ecuador-inmerso-ecua
- Arias, F. (2006), Desarrollo sostenible y sus indicadores. Recovered from: http://biblioteca.clacso.edu.ar/gsdl/collect/co/co006/index/assoc/D7597.dir/ Doc93.pdf>
- Asamblea Nacional del Ecuador (2008), Constitución de la República del Ecuador. Recovered from: https://www.asambleanacional.gob.ec/sites/default/les/documents/old/constitucion_de_bolsillo.pdf
- Azamar, A. and Ponce, J. (2015), *El neoextractivismo como modelo de crecimiento en América Latina*. Recovered from: http://www.redalyc.org/pdf/4255/425541212014.pdf
- Bayón, M. and Japhy, W. (2015), *Tundayme: el despojo minero avanza. Plan V.* Recovered from: http://www.planv.com.ec/historias/sociedad/tundayme-el-despojo-minero-avanza>
- Bebbington, A. (2012), "Extractive Industries, Socio-environmental Conflicts and Political Economic Transformations in Andean America", in A. Bebbington (ed.), Social Conflict, Economic Development and Extractive Industry: Evidence

- from South America, London, Routledge.
- Cámara de Minería del Ecuador (2013), Leyes y reglamentos del sector minero. Recovered from: http://www.cme.org.ec/index.php/mrp/lrs/lrs-leyes
- Cárdenas, J. (2013), "Minería en México: despojo a la nación", Revista Mexicana de Derecho Constitucional, no. 28, January-June.
- Carrascro, A. and Fernández, E. (2009), "Estrategias de resistencia indígena frente al desarrollo minero. La comunidad de Likantatay ante un posible traslado forzoso", *Estudios Atacameños*, no. 38, DOI http://dx.doi.org/10.4067/S0718-10432009000-200006
- Cataño, J. (2001), ¿Por qué el predominio de la teoría neoclásica? Recovered from: http://www.scielo.org.co/scielo.phpscript=sci_arttext&pid=S0">http://www.scielo.org.co/scielo.phpscript=sci_arttext&pid=S0">http://www.scielo.org.co/scielo.phpscript=sci_arttext&pid=S0">http://www.scielo.org.co/scielo.phpscript=sci_arttext&pid=S0">http://www.scielo.org.co/scielo.phpscript=sci_arttext&pid=S0">http://www.scielo.org.co/scielo.phpscript=sci_arttext&pid=S0">http://www.scielo.org.co/scielo.phpscript=sci_arttext&pid=S0">http://www.scielo.org.co/scielo.phpscript=sci_arttext&pid=S0">http://www.scielo.org.co/scielo.phpscript=sci_arttext&pid=S0">http://www.scielo.org.co/scielo.phpscript=sci_arttext&pid=S0">http://www.scielo.org.co/scielo.phpscript=sci_arttext&pid=S0">http://www.scielo.org.co/scielo.phpscript=sci_arttext&pid=S0">http://www.scielo.org.co/scielo.phpscript=sci_arttext&pid=S0">http://www.scielo.org.co/scielo.phpscript=sci_arttext&pid=S0">http://www.scielo.phpscript=sci_arttext&pid=S0">http://www.scielo.phpscript=sci_arttext&pid=S0">http://www.scielo.phpscript=sci_arttext&pid=S0">http://www.scielo.phpscript=sci_arttext&pid=S0">http://www.scielo.phpscript=sci_arttext&pid=S0">http://www.scielo.phpscript=sci_arttext&pid=S0">http://www.scielo.phpscript=sci_arttext&pid=S0">http://www.scielo.phpscript=sci_arttext&pid=S0">http://www.scielo.phpscript=sci_arttext&pid=S0">http://www.scielo.phpscript=sci_arttext&pid=S0">http://www.scielo.phpscript=sci_arttext&pid=S0">http://www.scielo.phpscript=sci_arttext&pid=S0">http://www.scielo.phpscript=sci_arttext&pid=S0">http://www.sci_arttext&pid=S0">http://www.sci_arttext&pid=S0">http://www.sci_arttext&pid=S0">http://www.sci_arttext&pid=S0">http://www.sci_arttext&pid=S0">http://www.sci_arttext&pid=S0">http://www.sci_arttext&pid=S0">http://www.sci_arttext&pid=S0">http://www.sci_arttext&pid=S0">http://www.sci_arttext&pid=S0">http://www.sci_arttext&pid=S0">http://www.sci_arttext&pid=S0">http://www.sci_arttext&pid=
- Comisión Económica para América Latina y el Caribe (Cepal) (2013), Recursos Naturales en UNASUR. Situación y tendencias para una Agenda Regional, Cepal, Santiago de Chile, United Nations.
- Comisión Interamericana de Derechos Humanos (CIDH) (2013), Intervención minera a gran escala en el Ecuador y vulneración de Derechos Humanos. Caso Corriente Resources, CIDH. Recovered from: http://www.cedhu.org
- Confederación de Nacionalidades Indígenas del Ecuador (Conaie) (2015), San Marcos está en peligro desde que llegó la minera china ecuacorriente, Conaie. Recovered from: https://conaie.org/2015/10/28/san-marcos-esta-en-peligro-desde-que-llego-la-minera-china-ecuacorriente/
- Daly, H. E. (1992), "Allocation, Distribution, and Scale: Towards an Economics that is Efficient, Just and Sustainable", *Ecological Economics*, 6.
- Dietz, S. and Neumayer, E. (2007), "Weak and Strong Sustainability in the Seea: Concepts and Measurement", Ecological Economics, 61.
- Dunning, T. (2008), Crude Democracy. Natural Resource Wealth and Political Regimes, New York, Cambridge University Press.
- EcuaCorriente S.A. (2010), *Proyecto de oro y cobre Mirador, ECSA*, *Actualización del estudio a 30.000* toneladas por día, ECSA. Ecuador, Provincia de Zamora Chinchipe.
- Fundación Regional de Asesoría en Derechos Humanos (INREDH) (2016), *Tercer desalojo en Tundayme por proyecto minero Mirador*. Recovered from: https://www.inredh.org/index.php/noticias-inredh/actualidad/525-ter-cer-desalojo-en-tundayme-por-proyecto-minero-mirador
- Gallopin, G. (2003), Sostenibilidad y desarrollo sostenible: un enfoque sistémico, Cepal. Recovered from: https://repositorio.cepal.org/bitstream/handle/11362/5763/S033120 es.pdf?sequence=1&isAllowed=y>
- Hartwick, J. (1977), "Intergenerational Equity and the Investing of Rents from Exhaustible Resources", *The American Economic Review*, vol. 67, no. 5.
- Hobson, K. (2013), "Weak" or "Strong" Sustainable Consumption? Efficiency, Degrowth, and the 10 Year Framework of Programmes. Recovered from: http://citeseerx.ist.psu.edu/viewdoc/download.

 DOI=10.1.1.838.6444&rep=rep1&type=pdf
- La República (2015), Correa teme que se inicie persecución en su contra si Lasso gana elecciones. Recovered from: https://www.larepublica.ec/blog/politica/2017/03/05/correa-teme-que-se-inicie-persecucion-en-su-contra-si-oposicion-gana-elecciones/
- López, F. and Eslava G., M. M. (2011), El mineral o la vida, la legislación minera en México, Centro de Orientación y Asesoría Pueblos Indígenas, Red IINPIM A.C. Recovered from:

 http://www.lopezbarcenas.org/sites/www.lopezbarcenas.org/sites/www.lopezbarcenas.org/les/El_mineral_o_la_vida_0.pdf
- López, I. (2012), Sostenibilidad "débil" y "fuerte" y democracia deliberativa –el caso de la Agenda 21 local de Madrid–. Recovered from: https://e-archivo.uc3m.es/bitstream/handle/10016/16270/tesis_lopez_pardo_2012. pdf? sequence=1>
- López, M. (2016), Conflictos mineros en América del Sur: una mirada a cuatro casos emblemáticos. Recovered from: https://es.mongabay.com/2016/11/ conflictos-mineria-latinoamerica/>
- Ministerio de Minería (2014), *Mirador, Proyecto que ayuda al desarrollo del Ecuador*. Recovered from: <www.mineria.gob.ec>
- _____(2016), Informe de servicios institucionales. Recovered from: http://www.mineria.gob.ec/wp-content/uploads/downloads/2016/02/351-1710923101-GUZMAN-LOOR-VIVIANA-ELIZABETH.pdf
- Morejón, G. (2012), Breve historia de la minería en el Ecuador y sus implicaciones ambientales. Ambiente Ecuador. Recovered from: http://biobanco.blogspot.com/2012/03/breve-historia-de-la-mineria-en-el.html
- Observatorio de Conflictos Mineros de América Latina (2016), Minería, violencia y criminalización en América Latina. Recovered from: https://www.ocmal.org/wp-content/uploads/2017/11/Mineria-violencia-y-Criminali-zacion-OCMAL.pdf

- Organización de las Naciones Unidas (ONU) (2014), *Principios básicos y directrices sobre los desalojos y el desplazamiento generados por el desarrollo*, ONU. Recovered from: http://www.ohchr.org/Documents/Issues/Housing/Guidelines sp.pdf>
- Patiño, E., Espinoza, J. and García, A. (2012), "Concesiones mineras en tierras ejidales: detrimento de la propiedad social", Revista Iberoamericana para la Investigación y el Desarrollo Educativo, no. 09, July-December.
- Pearce, D. W. y Atkinson, G. (1992), Are National Economies Sustainable? Measuring Sustainable Development, Centre for Social and Economic Research on the Global Environment, London, Working Paper 92-11.
- Prebisch, R. (s.f.), El desarrollo económico de la América Latina y algunos de sus principales problemas. Recovered from: https://repositorio.cepal.org/bitstream/handle/11362/40010/prebisch_desarrollo_problemas.pdf?sequence=1
- Programa de las Naciones Unidas para el Desarrollo (PNUD) (2015), *Objetivos de Desarrollo Sostenible*. Recovered from: http://www.undp.org/content/undp/es/home/sustainable-development-goals.html
- Ramírez, V. and Arango, J. (2014), Evolución de las teorías de explotación de recursos naturales: hacia la creación de una nueva ética mundial. Recovered from: http://www.scielo.org.co/pdf/luaz/n39/n39a17.pdf
- Ramos, J. (2002), Un precedente lejano del debate sobre la sostenibilidad: el movimiento conservacionista americano (1890-1920). Recovered from: http://www.Revistasice.Info/Cachepdf/ICE_800_31-46__D6C0C94FEB041B-50816C572FEECBDDCF.pdf
- Revista Clinica Ambiental (2012), "Infancia de oro en la Cordillera del Cóndor". Recovered from: http://www.clinicambiental.org/docs/publicaciones/ccc2f.pdf
- Rodríguez, J. (2008), Los movimientos indígenas en América Latina. Resistencias y alteridades en un mundo globalizado. Recovered from: http://www.ugr.es/pwlac/G24_37Javier_Rodriguez_Mir.html
- Sacher, W. and Acosta, A. (2012), Análisis y datos estadísticos sobre la minería industrial en el Ecuador. Recovered from: https://www.researchgate.net/ pro le/WilliamSacher/publication/307638449_La_Mineria_a_Gran_Escala_en_el_Ecuador/links/57ce5b3908ae057987aac1db/La-Mineria-a- Gran-Escala-en-el-Ecuador.pdf>
- Sala-i-Martin, X. (1990), Lecture Notes on Economic Growth (I): Introduction to the Literature and Neoclassical Models. Recovered from: http://www.nber.org/papers/w3563>
- Secretaría Nacional de Planificación y Desarrollo (2013), *Plan Nacional del Buen Vivir 2013-2017*, SENPLADES. Recovered from: http://www.buenvivir.gob.ec/
- Turner, RK. (1993), Sustainability: Principles and Practice, in RK Turner (ed.), Sustainable Environmental Economics and Management: Principles and Practice, London, Belhaven Press.
- Villavicencio, F. (2014), Mirador el contrato de plenos poderes con EcuaCorriente. Plan V. Recovered from: http://www.planv.com.ec/investigacion/investigacion/mirador-el-contrato-plenos-poderes-con-ecuacorriente
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- ² Citizen participation: participation in which individuals belong to associations or organizations to defend the interests of their members: however, the State is not the principal voice, but rather other social institutions are (Villarreal, 2010) http://independent.academia.edu/VillarrealMarr%c3%ADnezMar%c3%ADnezMar%c3%ADaTeresa
- ³ Land tenure: defined as access to the rights to use, control, and transfer land which is to say, who can use the land, for how long, and under what circumstances (FAO, 2011).
- International Labor Organization (ILO) Convention 169 is charged with regulating the customary rights and duties of the original peoples, as well as principles pertaining to the use and transfer of indigenous lands and natural resources. Finally, it refers to cultural conservation and measures that enable an education at all levels for community members.
- 5 Inter-American Human Rights Commission.
- ⁶ EcuaCorriente S.A. (ECSA) does exploration and development of copper mines in Ecuador. The company owns the Mirador and Panantza San Carlos projects.
- Real and property rights; distinct and independent from ownership over the surface land, even if they have the same owner; opposable by the State and any other person; transferrable and transmissible; can be mortgaged and subject to other real rights, and, in general any act or contract; and governed by the same laws as all other property, unless otherwise stated by the provisions of this law or the Mining Code (Comisión Chilena de Energía Nuclear, 2013).
- ⁸ The mining easement is designed to grant to the exploration or exploitation concession-holder a legal title empowering it to access the surface of the property. Constitución de servidumbre minera frente a la legislación ambiental, p. 92.
- ⁹ Data generated by the Ministry of Energy and Mines and the ARCOM. However, pursuant to other sources of information like information provided by community members living in the sector, the amount of time the mining company will stay is not defined by the government, but rather ends up being indefinite, decided by the multinational itself.