

THE CHALLENGE FOR ACHIEVING SUSTAINABLE DEVELOPMENT THROUGH RESPONSIBLE SMALL-SCALE MINING IN INDIGENOUS AREAS IN BRAZIL

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ABSTRACT

This paper discusses the issue of responsible small-scale mining within indigenous territories in Brazil, based on the preliminary findings of an on-going research carried out in the northwestern part of the Amazon region, in Brazil. The region concentrates the largest indigenous population of the country and includes three major linguistic branches (Aruak, Tukano and Maku) with over 23 ethnic groups, centered in the town of São Gabriel da Cachoeira. Subsistence issues affect these communities as it appears that the assistance provided by the current social and environmental programs is not sufficient to reach all communities, in particular, those located in more remote areas. In terms of the current legislation, the Brazilian Constitution of 1988 establishes that the authorization for any mining initiative within indigenous areas must have specific approval by the National Congress. In order to address this issue, the local indigenous communities have organized themselves as an indigenous cooperative called CIERNM to seek common grounds and legal mechanisms to advance towards sustainable development of the communities. The proposal of CIERNM is to achieve social development through properly managed actions focused on social, environmental, cultural and economic responsibility. Hence, responsible small-scale mining has been identified as one of the main vectors for achieving sustainable development in the communities due to the known mineral occurrences in the region, which include gems, base metals and precious metals. The article reports the preliminary findings of the research, including contacts performed by CIERNM with local, regional and federal authorities, agencies and universities to build a persuasive project to carry out responsible small-scale mining in the area. The results also include the proposed approach with the recommended steps to obtain the necessary approval by the National Congress and other authorities as established by the current legislation.

KEYWORDS

Amazonas, Responsible Mining, Small-Scale Mining, Indigenous Lands, Sustainable Development

INTRODUCTION

The county of São Gabriel da Cachoeira is located in Brazil extreme northwest, state of Amazonas. To the north is limited to Colombia and Venezuela, to the south and east is the county of Santa Isabel do Rio Negro, and to the south is the county of Japurá. The region is known as "Dog's Head" due to the geographic format and has the highest concentration of indigenous population in the Brazilian territory, estimated in 43,094 inhabitants in 2015 by the Brazilian Institute of Geography and Statistics (IBGE). Approximately 20 thousand of them live in São Gabriel da Cachoeira and 25 thousand live in villages along the main riverbanks, according to information provided by Major Pontes from the 2nd Jungle Infantry Brigade of the Brazilian Army. The main linguistic branches are aruak, tukano and

maku, summing up to 23 ethnicities, each of them with its own language spoken by the majority of the population (being 75% indigenous).

The history in the region has records since the missionaries' entry, especially the Salesians. The initial tripod of their goals was education, catechism and health. Education because there was the concern the natives were not deceived by *batelões* (name given to the traders from that time that used barges), catechism because that was the main reason of missions, and health as there was the need to aid both natives and missionaries against tropical deceases.

After the Federal Constitution was promulgated in 1988, Indigenous Lands were demarcated in the Dog's Head region as a result from continuous claims by the indigenous movement supported by non-governmental organizations. With that started the search for political and economic sustainability in the region, mining has been a more constant subject to be debated among natives through representative political organizations such as the Federation of the Negro River Indigenous Organization (FOIRN), as well as official bodies like the State of Amazonas Legislature, and Secretary for Indigenous Affairs (SEIND). Nevertheless, prior negative experiences, e.g. the Traíra Ridge in the Tiquié River, and the Porcos Ridge in the high Içana River, are often highlighted and cause distrust among the interested parts.

In many cases, discussions about the subject were pointed out by the indigenous living in the city, arising mistrust by the natives living in the Indigenous Lands. It is in the middle of this argumentation that the Indigenous Cooperative for Natural Resources and Minerals Extraction (CIERNM) was created to bring together natives from the Indigenous Lands that want – among other lines of action – to develop the exploration of mineral resources focusing on responsible small-scale mining. It is expected this approach to be a possible vector for social and economic development, and being done under the legal requirements it will guarantee better basic life quality to the peoples in the region, also being a lever to achieve further sustainability policies.

Searching for support on the feasibility of the cooperative's goal has been a challenge towards official bodies, political agents and local universities. Mining subjects are always faced as harmful to the environment enforced by the fact the initiative comes from native indigenous peoples organized in a cooperative that reside in Indigenous Lands, which causes weirdness to the existing organizations in governmental and non-governmental spheres.

METHODOLOGY

This paper is based on information collected by the Indigenous Cooperative for Natural Resources and Minerals Extraction (CIERNM), located in São Gabriel da Cachoeira, in partnership with USP Center for Responsible Mining (NAP.Mineração). The methodology being presented is based on the information collected by legal instruments that regulate mining in indigenous territories in Brazil, and the research is based in the responsible mining concept with a consistent strategic planning.

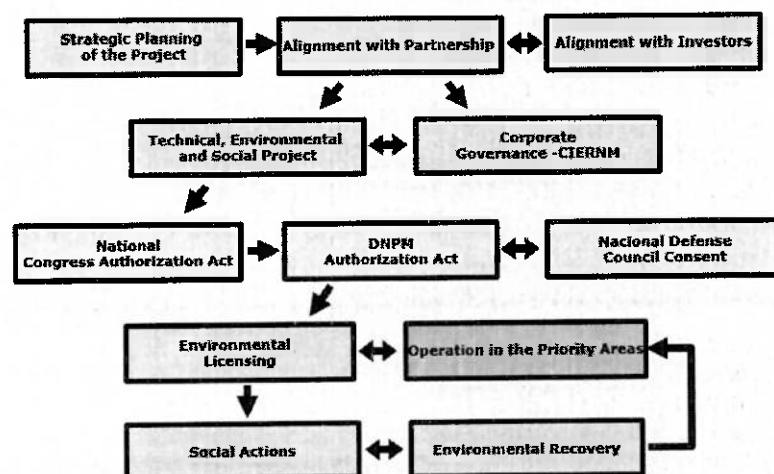


Figure 1 – Proposed methodology for implementation of responsible mining in indigenous lands

In the historical context, Brazil has adopted a new Federal Constitution in 1988 and recognized the cultural plurality of indigenous peoples. The new constitutions have also granted them the right to permanent lands (Paixao, Hespanha, Ghawana, Carneiro, Zevenbergen & Frederico, 2015).

The Constitution of the Federative Republic of Brazil (Brazil, 1988), defines in the Article 231:

Paragraph 1. Lands traditionally occupied by Indians are those on which they live on a permanent basis, those used for their productive activities, those indispensable to the preservation of the environmental resources necessary for their well-being and for their physical and cultural reproduction, according to their uses, customs and traditions.

Paragraph 2. The lands traditionally occupied by Indians are intended for their permanent possession and they shall have the exclusive usufruct of the riches of the soil, the rivers and the lakes existing therein.

Paragraph 3. Hydric resources, including energetic potentials, may only be exploited, and mineral riches in Indian land may only be prospected and mined with the authorization of the National Congress, after hearing the communities involved, and the participation in the results of such mining shall be ensured to them, as set forth by law.

As the Statute of Indians (indigenous people, as referred in the Constitution) was established (Law n. 6,001, from December 19th, 1973), it defines that federal lands can be delimited in any part of the territory, being their possession and occupation by indigenous groups recognized. Afterwards, it was created the National Indian Foundation (FUNAI) that is active until today and holds the responsibility to promote and protect the indigenous peoples and guarantee the protection of indigenous lands (Paixao et al. 2015). FUNAI also develops national strategies related to the lifestyle, development and integration of the groups to the society Paixao et al., 2015).

Paixao et al. (2015) quotes the division of areas reserved to indigenous tribes as it is described in the Law n. 6001/73, as follows:

- a) Indigenous Reserve – An area to be used as the habitat of indigenous groups, having the sufficient means of subsistence.
- b) Indigenous Park – Area under indigenous possession, in which their degree of integration allows Federal assistance in economic, educational and health means, while preserving flora, fauna, and the natural landscape of the region.
- c) Indigenous Agricultural Colony – Area used for the development of agricultural exploration (farming and livestock), administered by the indigenous affairs organization (presently, FUNAI). These colonies have a mixed settlement of indigenous groups and non-indigenous individuals.
- d) Indigenous Federal Territory – It is an administrative unit directly under Federal Administration of the Brazilian Union. It is required that, within this unit, at least a third of the population is indigenous.

Even though the indigenous peoples have guaranteed the possession and use of rivers, lakes and soil, it is forbidden for them to explore hydric and mineral resources; only the National Congress can authorize mining initiatives in indigenous lands, securing their rights to participate in the profits (Fernandes, Alamino & Araujo, 2014; Brazil, 1988).

With the growing international recognition of indigenous rights, changes in corporation policies being done mainly by international indigenous organizations, and a greater coverage of the indigenous peoples political capability, the juridical and political context is being renewed for mineral extractive industries (Nygaard, 2016). In a positive perspective, countries as Canada, Australia, Colombia, Nicaragua and Philippines are ahead in the recognition process of indigenous legal rights (O'Faircheallaigh, 2013). However, the extraction of mineral goods in indigenous lands creates doubts and controversies. The indigenous peoples deal with the social, cultural and environmental consequences, but have no financial compensation or return (Nygaard, 2016).

Amazon is the greatest rain forest in the world, with a rich biome with multiple characteristics. A great part of the forest is in border areas. Starting in the 70's, under the military regime, the economic expansion boosted the northern region of Brazil and directly affected the Amazon with deforestation and invasion to indigenous areas (Paixao et al., 2015).

According to statistical data from IBGE, approximately 896,917 people declare themselves as indigenous peoples, divided in 305 ethnical groups and 274 different languages. From the total indigenous population officially recognized by the government, almost 517 thousand (57.7%) live in indigenous lands, among them 94.9% live in rural areas; around 379 thousand (42.3%) live outside the indigenous lands, and 78.7% of them live in the urban area (Paixao et al., 2015; IBGE, 2010).

National Congress Authorization

According to Villas Bôas (2013), the extraction of mineral goods in indigenous lands is legally possible after authorized by the National Congress, highlighting the participation of indigenous in the mining results, as disposed in the law.

Due to the lack of regulation concerning the participation of indigenous communities in the mining results, it cannot be granted mining titles in indigenous lands, because it lacks the presupposed authorization of its validity (Villas Bôas, 2013).

National Department of Mineral Production (DNPM) Authorization

An important fact to be highlighted is that when the Federal Constitution assigned the authorization for mining in indigenous lands to the National Congress, it was taken from DNPM the decision power concerning the subject. Therefore, the institution with powers to decide whether research or mining works can be done in indigenous lands or not is the National Congress alone (Curi, 2007).

National Defense Council Consent

The Law n. 6,634, from 1979, regulates the extraction of mineral goods in border areas of the country. For it to be approved it is necessary a prior consent by the National Defense Council. The constituent predicted special treatment to the mineral activity in border areas, due to its importance to national defense (Villas Bôas, 2013).

Responsible Mining in Indigenous Lands

As any other industrial activity, mining activities work with the goal to supply social demand. However, mining finds its raw materials directly from nature, what characterizes it as an essentially extractive industry. Accordingly, besides being concerned about political-economic factors inherent to any production process, mining also has to develop its activities with greater care, as it directly deals with nature and ecosystems.

According to Vale (2002), the concept of mining and sustainable development is related to a development model that meets the need of the current generation without compromising the conditions of future generations to use mineral resources.

The responsible small-scale mining project in indigenous lands is not associated to expectations for radical and instantaneous changes in the local community life. What is expected is a continuous process for better conditions in education, infrastructure, transportation, health and social development, committed to practical results.

Responsible Mining in Indigenous Lands represents an initiative that is needed and indispensable to consolidate methods, procedures and processes that allow local operations to be developed as responsible small-scale mines. It should involve all the community, focusing in the associates of CIERNM in the decision making process in a way to discuss and clarify all the challenges, demands, needs and limitations involved.

The preservation of environmental resources in indigenous lands is fundamental to guarantee the survival of their future generations, as well as to maintain the possession and control of the activities and

projects developed on the hands of the indigenous communities (Paixao et al., 2015; ISA, 2000). Indigenous groups must promote economic and environmental sustainability, not being depended in any third parties to do it (Paixao et al., 2015).

According to Paixao et al. (2015), the regularization of indigenous lands is a slow and bureaucratic process. Beyond an economic perspective, mineral extraction in indigenous lands needs a perspective that reflects the ethnic aspects related to the environment, society and groups that will be affected by the mining activity (Ribeiro, 2015).

DISCUSSION

CIERNM was founded on February 28th, 2015 constituted by exclusively indigenous associates. As illustrated in Figure 2 the office is located in the county of São Gabriel da Cachoeira, due to the convergent flux of rivers to that geographic location. The intention behind its creation was to add incentives to the existing organized movements to the socioeconomic sustainable development of indigenous peoples cooperated through the extraction and commerce of natural and mineral resources where they live.

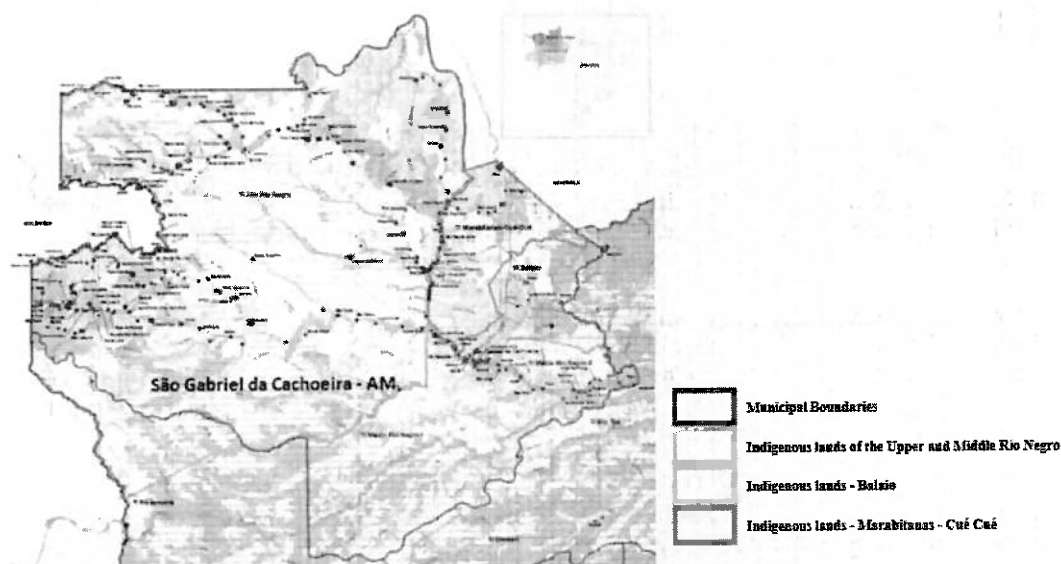


Figure 2 – Map of the city of São Gabriel da Cachoeira – AM ISA (2006)

It is understandable that those activities will ensure the permanence of indigenous families in their communities as labor activities will be provided. Furthermore, they will aid in the maintenance of borders and will cooperate in the national sovereignty. The initiative has received a prior assent from the National Defense Council in an act dated to June 26th, 2015 and published on the Official Gazette, n. 121 from June 29th, 2015.

National Congress

The National Congress performs the national legislature, and is composed by the Deputies Chamber and the Senate. The Deputies Chamber is divided in several fronts, each formed by deputies who defend common interests, forming the so-called benches. Leaders who have an important role in the decisions taken by the Congress lead the benches; they gather to set the voting agenda of the Plenary and guide members in the most controversial votes and of great interest (Alves, 2012).

Alves (2012) states that is possible to notice that what there is more are leaders in the Congress. Being so, these parliamentary benches of different branches act following the interests of the sponsors of their campaigns. The deputies seek their leader's cooperation so they can do and defend their work and interests.

Bill 1,610/96 – Exploration of Resources in Indigenous Lands

The subject of mining in indigenous lands was discussed in debates during the elaboration of the Federal Constitution of 1988 and there was a mobilization of parliamentary benches to defend their interests. The approved text exposes the conditions required for the regularization of research works and future mining rights in indigenous areas. Those conditions are set in the Articles 176 and 231.

The Deputies Chamber resumed discussions concerning the subject taking into account the Bill 1,610/96. It aims to regulate a paragraph in Articles 176 and 231, and is still in course in the house.

The main concern is not whether the mining activity should or should not be regulated, but the interests of the congressional representatives that are in front of the discussion. In addition, it is important to avoid the untying of the matter from other subjects in debate, such as the Mining Code and the Indigenous Peoples Statute that are directly linked with the issue of mining in indigenous lands. Finally, subjects that are directly related and that should not be treated separately and in different times (Raisa, 2010).

According to publications by Greenpeace (2015), Bill 1,610/96 is a farmer's bench demand over the rights of indigenous peoples, as well as the Constitutional Amendment Bill (PEC) 215 that wants to change the power to determine indigenous, *quilombola*, conservation unit lands from the Executive (government) to the Legislature. Going against this interest, the Senate has already positioned itself against the approval of PEC 215.

Mining Interests in Indigenous Lands

According to DNPM, an area of mining interest within indigenous lands is defined when its polygon is entirely inserted in an indigenous area. Even though such areas may still be in stage of exploration, DNPM does not address any type of evaluation on the process. Therefore, the mining interests are merely speculative, working only as an expectation for the individual right (Curi, 2007). These interests started in the 80's by companies with a perspective of a future constitutional authorization to remove the principle of nullity of Paragraph 3 of Article 231.

The mining interests, when filed at DNPM, are put under a standstill condition. In practice, this means the process will be archived without a technical evaluation.

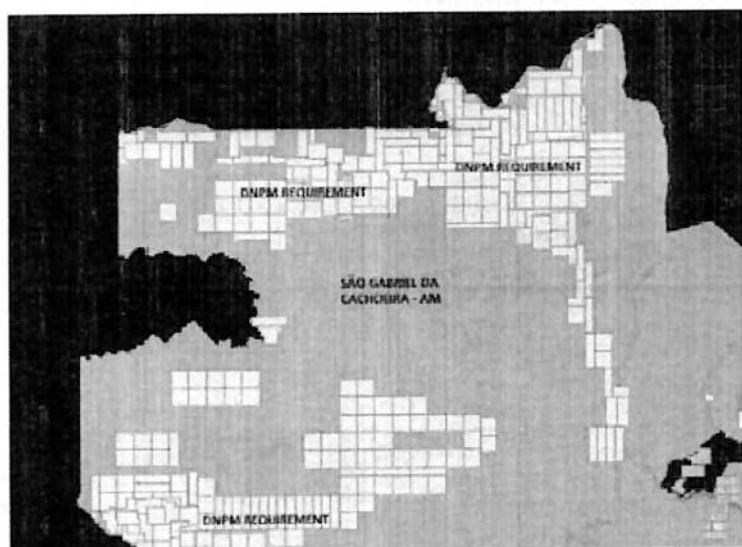


Figure 3 – Filed requests at DNPM in indigenous lands DNPM (2016)

As illustrated in Figure 3 the mineral rights polygons in yellow and the indigenous land in the Dog's Head region in red. These mining interests grant no individual right to the interested part, but only an expectation of right.

Community Consultation

A constitutional requirement from the mining authorization in indigenous lands is the consultation of the indigenous communities affected by the possibility of mineral exploration in their lands. Despite references made in the Federal Constitution and the Bill concerning prior consultations, how it should be done is not specified or regulated, granting the Congress the duty to evaluate it when done. While the consultation is made, it is important to listen all the affected community; this is established in the Article 231 from the Constitution and aims to secure the participation of indigenous communities in the decision making process of economic projects to be developed in their lands, and to categorically investigate the impacts undertaken by the community (Curi, 2007).

It must be emphasized that the consultation should not be performed to the bodies representing the indigenous peoples interests, e.g. FUNAI, but exclusively to the indigenous natives in the affected areas.

In addition to the prior consultation, it is also foreseen in the Article 231 the participation of indigenous peoples in the economic results from the mineral exploration in theirs lands. On PEC 215, it is planned a minimal participation of communities over the economic results.

It is important to highlight the need of technical and legal elements that assure broad security to the rights of indigenous peoples, their participation in the decision making process, and a fair and clean participation in the mining results, as expected in the Federal Constitution. From the imposition in the Constitution, there is no doubt that only the National Congress has the power to provide authorization for mining, and the indigenous communities affected must be consulted and their right to participate in the economic results secured and assured. Therefore, the discussion of this subject demands several debates with the indigenous peoples that must have active vote in the decision taken in the regulation process.

FINAL CONSIDERATIONS

CIERNM ordinary meetings are always based on the context of the county of São Gabriel da Cachoeira that covers a great part of the indigenous lands, which is not adequate to the surviving of indigenous peoples because it lacks a proper economic identity. The municipality survives solemnly by resources from official governmental programs.

The proposal of the small-scale sustainable mining sets as possible vector towards economic and social development in the area. With the legal requirements taken into account, the proposal can acts as a support to enforce further sustainability policies. Special attention towards the governmental control entities should be taken since the proposal is pointed to be the basis for future policies in the field. Only through its proper execution, monitoring, and observation through own governances will demonstrate the driving importance of the act for sustainability in indigenous lands and effecting the constitutional dictum.

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