



ARTISANAL MINING AND PROPERTY RIGHTS PARTICIPATIVE MANAGEMENT OF MINING ZONES

SEEKING A MODEL OF DECENTRALIZED GOVERNANCE OF ALLUVIAL MINING RESOURCES IN SOUTHWEST CENTRAL AFRICAN REPUBLIC

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Cover Photo: The city hall of Ndolobo in reconstruction with funds levied from the local gold mining site
Credits: Hervé Pounou, USAID AMPR

ARTISANAL MINING AND PROPERTY RIGHTS TASK ORDER

PARTICIPATIVE MANAGEMENT OF MINING ZONES

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LIST OF ACRONYMS

AEA	<i>Autorisation d'Exploitation Artisanale</i>
USAID AMPR	Artisanal Mining and Property Rights
ASM	Artisanal and Small-Scale Mining
BRGM	<i>Bureau de Recherches Géologiques et Minières</i>
CLS	<i>Comité Local de Suivi</i> (KP monitoring committee at zone level)
DAPM	<i>Direction d'Appui à la Production Minière</i>
DPR	<i>Direction de la Prospection et de la Recherche</i>
DR	<i>Direction Régionale</i>
KPCS	Kimberley Process Certification Scheme
MMG	Ministry of Mines and Geology
OHADA	<i>Organisation pour l'Harmonisation en Afrique du Droit des Affaires</i>
PEASM	Permis d'Exploitation Artisanale Semi-Mécanisé
PRADD	Property Rights and Artisanal Diamond Development
ZEA	<i>Zone d'Exploitation Artisanale</i>

I.0 INTRODUCTION

I.1 OBJECTIVES

The Artisanal Mining and Property Rights (AMPR) project supports the USAID Land and Urban Office in improving land and resource governance and strengthening property rights for all members of society, especially women. Its specific purpose is to address land and resource governance challenges in the artisanal and small-scale mining (ASM) sector, using a multidisciplinary approach and incorporating appropriate and applicable evidence and tools. The project builds upon activities and lessons from the Property Rights and Artisanal Diamond Development (USAID PRADD) project in its first (2008-2013) and second (2014-2018) generation.

USAID AMPR is structured around four objectives:

- **Objective 1:** Assist the Government of the Central African Republic to improve compliance with Kimberley Process requirements to promote licit economic opportunities.
- **Objective 2:** Strengthen community resilience, social cohesion, and response to violent conflict in CAR.
- **Objective 3:** Increase awareness and understanding of the opportunities and challenges of establishing responsible gold supply chains in CAR.
- **Objective 4:** Improve USAID programming through increased understanding of linkages between ASM and key development issues.

As part of the project's component I, AMPR Activity I.2.3 intends to pilot a system for taxing diamond revenues for community development. This activity is based on the successful "SODEMI Model" that was supported by PRADD II in Cote d'Ivoire. Under this model, communities organized as cooperatives participate in mine site monitoring in exchange for taking a percentage of revenue for community-led infrastructure projects.

The central question guiding this research is to enquire whether a model that worked in northern Côte d'Ivoire might be transferred to the southwestern Central African Republic despite very different socio-economic contexts. With this objective in mind, this study first describes the core components of the "SODEMI" model, and second, from field information gathering analyzes how the local features of a few preselected southwestern Central African mining communities might respond to these core components from a socio-cultural and economic perspective. From the outset, the author did not expect to suggest replication of the Ivorian model, but rather to look at it for inspiration. This said, it is worth noting that in 2013 the Ivorian diamond economy bore many traits that are common with the Central African economy today, including such features as the absence of a legal chain of custody; an embargo on diamond exports enforced by the Kimberley Process; a strong presence of illegal armed groups in the marketing system; and a contradiction whereby subsurface rights belong by law to the state while in practice these rights are also claimed by local communities.

Finally, it is important to stress that the spirit of the present study was more practical and programmatic than theoretical and legalistic. Its aim was not to design a model of local governance to reform the Central African legislation, but to propose a workable system to be piloted, as an experiment, in one of two local communities where the USAID AMPR project is expected to work in the years to come.

1.2 BACKGROUND

The diamond economy in the Central African Republic has been experiencing an unprecedented crisis since the 2013 political and military crisis. Despite the election of a legitimate government in March 2016 and the redeployment of mining governance structures in the Western mining areas—Kimberley Process Permanent Secretariat, including KP Monitoring Committees or *Comités Locaux de Suivi* (CLS), *Direction d'Appui à la Production Minière* (DAPM) and *Directions Régionales* (DR)—the government does not have much control over the local dynamics of the diamond economy.

One of the dynamics leading to the diamond economy crisis is the sharp fall of artisanal production. Taking into account the official exports and the estimated level of smuggling before 2013, the total average production from 2000 to 2012 was 490,000 carats per year. Most recent studies estimated real production between 330,000 and 360,000 carats in 2018.¹ The number of active artisanal diamond miners (currently estimated at around 35,000 site managers and 270,000 mine diggers throughout the country) fell by one third. One of the direct reasons for this downward production spiral is the issue of pre-financing: only 20% of diamond producers and 50% of gold producers now receive financial support for production, compared with much higher percentages receiving pre-financing prior to 2013. In a local economy that is highly dependent on mining income, this trend presents a serious challenge to the survival and resilience of local communities.²

Another dynamic leading to the diamond economy crisis is the unprecedented level of smuggling. While the contraband of diamonds is estimated to have been about 20-40% of production between 1961 and 2012,³ the illicit chain's estimated proportion reached 82% of real production in 2017 and 96% in 2018. Good governance alone cannot address such a dramatic situation. Economically, it means that illegal smugglers are more powerful than legal exporters in the competition between the two supply chains. Politically, it creates a conundrum where every attempt to boost local production or to support mining communities in an economic context dominated by smuggling runs the risk of feeding the illegal chain even further.

Therefore, a successful model of decentralized governance of alluvial mining resources should not only seek to promote community development through community-led infrastructure and other local development projects, but also to boost local mineral production and to strengthen the legal chain of custody. The model should seek to support food security and community development, but also inadvertently contribute to smuggling. This perspective led to the following goals for the research:

- Design a system that **promotes self-financing**. At present, self-financing of artisanal miners seems like the only option given the decline of the traditional pre-financing and commercialization model.
- Design a system that **ensures geographic traceability**. While strengthening the legal chain clearly needs more than a governance system, an enabling environment based on geographic traceability would make it more difficult for mineral products registered at production to enter the illegal supply chain.

¹ Dewitt Chirico (2018) for USGS, Pennes (2018) for UNDP/UNICEF.

² The Southwestern mining communities are structurally more dependent on mining income than in other areas of the country: around 75% of the aggregate income of mining households comes from the mine.

³ Doko Mazido Yélé (2011), World Bank (2008).

1.3 OPPORTUNITIES

While the present situation in the diamond economy in CAR seems quite bleak, the possibility of trying a new model of participative management in a few diamond-producing communities can build upon three major opportunities.

The first opportunity is that the time is ripe for a reform of mining governance, especially in the direction of local community development. For quite a long time, the mining policy of the government of CAR used to focus essentially on fostering the production of geodata of industrial deposits and on attracting industrial and semi-industrial producers. The 1995 *Plan Minier*, which the Ministry of Mines and Geology (MMG) designed with the support of the French geological agency *Bureau de Recherches Géologiques et Minières* (BRGM), focused mainly on geological research and prospection. The 2003 *États Généraux du Secteur Minier* and the ensuing 2004 Mining Code again focused mainly on the mining industry, even if the MMG introduced some new elements, such as mining cooperatives, to support artisanal production and marketing.

The legislation balanced industrial and artisanal production in implementing regulations, but in practice the MMG continued to envisage ASM through the lens of formalization and the fight against fraud. In 2011, the Poverty Alleviation Strategic Paper, although not produced by the MMG but the Ministry of Planning and Economy, was a turning point as it linked ASM and poverty alleviation for the first time. Only in the aftermath of the 2013 crisis did the MMG officials start seriously considering ASM as a positive and development-inducing activity. The 2014 *Atelier de réflexion des ingénieurs des mines* proposed concrete measures to make ASM both formal and profitable. In 2014-2016, the Natural Resources Committee of the National Assembly listed the principles that would make mining resources a tool for poverty alleviation.

Finally, the policy of the current government now explicitly promotes the economic revival of the ASM sector both within and beyond the boundaries of the MMG. The 2017-2021 *Plan national de relèvement et de consolidation de la paix* (RCPCA) plans to boost and support artisanal mining production as a tool for development and peacebuilding through legal and operational reforms: A “reform of the legal and institutional framework will be undertaken;” “artisanal miners will receive support to perfect their methods of production and to organize themselves into cooperatives in order to improve their livelihoods [...]” and “in the medium term other measures will be adopted to attract investment in the [ASM] sector, in particular through an improvement of the mining cadaster.”⁴ The last point in particular could be interpreted as a desire to experiment with new models of participative management of mining zones, in the sense that a mining cadaster of ASM sites could be improved through the participation of local communities in its update and management.

The second opportunity is that the recent Peace Agreement negotiated in Khartoum between the government and the 14 recognized rebel groups and signed in Bangui on February 6, 2019 explicitly refers to the decentralization of natural resources governance and envisages legislation to that effect. The government commits “to promptly adopt a new law on decentralization (laws on territorial units and administrative districts) and implement it through the effective transfer of the skills and resources required at the prefectural and local levels” (Article 4.b) and “to create the conditions required for the whole of the population of the Central African Republic to benefit equitably from the exploitation of the country’s natural resources and the revenues generated” (Article 4.l).⁵

The third opportunity is that the diamond economy and supply chain have reached such a rock bottom point that many stakeholders appear to be ready to experiment with innovative solutions. The

⁴ RCPCA 2017-2021, 3rd Pillar, Extractive Industries, page 40.

⁵ Political Agreement for Peace and Reconciliation in the Central African Republic, UN Security Council S/2019/145.

discussions with the MMG officials on April 19, 2019, revealed unusual open-mindedness of government technicians toward participative systems between the state and local communities. Even the discussions with local communities during the field research showed a nuanced split between the old generation, which was still attached to the traditional cascade financing and buying system, and a significant proportion of the mining youth who do not believe that the “good old days” will come back and therefore are ready to try new models.

Methodology

The research consisted of the following activities:

- April 1-5, 2019: Review of CAR legislation and preselection of mining communities;
- April 5-8, 2019: Consultations with Ministry of Mines and Geology (MMG) and AMPR, finalization of research questions and communities to visit;
- April 9-17, 2019: Field visit to 10 mining communities, consultation with artisanal miners and customary leaders;
- April 19, 2019: Presentation of preliminary findings to MMG cadres and AMPR personnel;
- April 20-May 20, 2019: Review of secondary literature on ASM decentralized governance and report writing.

The consultant organized consultative meetings with various stakeholders in Bangui and carried out field visits with the AMPR Compliant Zone Extension Specialist, Herve Pounou, a mining geologist involved in the PRADD project since 2011. They both agreed that the main principle of the SODEMI model in Côte d'Ivoire was grounded on a co-management regime of mining zones governed by mining authorities and local customary authorities, and that the core components of the SODEMI model—the participative management of a mining zone—were the following:

- The insurance of a **geographic traceability** of production, which in CAR would take the form of a “community production registry” (*cahier de production communautaire*).
- The existence of geographic planning, or **zoning**, along with the involvement of customary authorities in the granting of mining sites to producers.
- The **protection of mining rights** of artisanal producers within the zone, either as individuals or mining cooperatives; and
- The creation of incentives for local communities to promote the good governance of the sector through the levying of a percentage of earnings to fund **community development** projects.

Finally, the consultant and the AMPR project management team determined that the criteria to pre-identify local communities to visit were the following:

- Communities be located within the intervention areas of the AMPR project: provinces of Mambéré-Kadéi, Sangha-Mambéré and Lobaye.
- The main focus is on diamond mining but at least one community is a gold-producing one.
- Communities are known to have relatively strong traditional and customary structures.

The table below lists the local communities consulted and assessed for this study.

Community	Subprefecture	Deposit and production	Coordinates	
			Latitude	Longitude
Sama I	Carnot	Alluvial diamond	4.838035°	15.869894°
Somica	Carnot	Alluvial diamond	4.914675°	15.738944°
Sangouma	Carnot	Alluvial diamond	4.761693°	15.927236°
Gboko	Carnot	Alluvial diamond	4.854426°	15.892695°
Goffi	Berberati	Alluvial diamond	4.686830°	15.990494°
Bolet	Berberati	Alluvial diamond	4.653116°	15.945966°
Batouri-Danze	Berberati	Alluvial diamond	4.26187°	15.92394°
Ngoungourou	Nola	Alluvial diamond	3.69932°	16.18919°
SCED-Ndelengué	Nola	Alluvial diamond	3.401482°	16.245252°
Ndolobo	Mbaïki	Bedrock gold	3.855825°	17.855487°

Figure 1: Map of Study Sites



2.0 KEY FINDINGS

Discussions with the USAID AMPR project personnel and Ministry of Mining and Geology officials in Bangui, followed by a 9-day field mission, led the team to refine the criteria related to the participative management of mining zones and attribute a scoring to each of the visited communities. These indicators serve as a basis to measure the prerequisite conditions of success if a decentralized minerals management system were to be implemented by the project. For the purpose of this report, they are also used to structure a thematic discussion on whether and how such a model can work in the present conditions of Southwest CAR.

The eight selected criteria are:

1. **Leadership:** The authority and legitimacy of the village chief and village elders, their ability to build, maintain or change structures within the community, and the responsiveness of community members to such authority.
2. **Land management:** The cultural knowledge the community has on its own land and its capacity to manage it, i.e., set limits, authorize and revoke usage rights, and arbitrate between different practices⁶.
3. **Interest and Motivation:** The community's appetite for a new form of management of mining resources in partnership with the government and a USAID-funded project; more generally, its interest to try out new systems.
4. **Production management:** The mining potential of the community (in terms of deposits as well as work force) and the potential for geographic traceability, through setting up a production declaration system.
5. **Community initiative:** The capacity of community members to pool resources together to undertake any sort of enterprise servicing or benefitting the community at large.
6. **Economic diversification:** The breadth of other economic activities conducted by households in the community other than artisanal mining.
7. **Access:** The accessibility of the community by road transportation, both in terms of physical security and road conditions.
8. **Cohesion:** The level of mutual trust between community members themselves.

⁶ The French word “*terroir*” more accurately describes the cultural notion of a land inhabited by locals and managed according to their traditions. This indicator was named “*gestion du terroir*.”

The table below concisely evaluates those criteria for each visited community.

Community	Cohesion	Leadership	Community Initiative	Interest/Motivation	Production Management	Land Management	Access	Economic Diversification
SAMA I	Strong	Strong	Weak	Average	Average	Strong	Weak	Average
Somica	Average	Weak	Weak	Weak	Average	Strong	Strong	Strong
Sangouma	Strong	Strong +	Average	Strong	Strong	Strong +	Weak -	Weak
Gboko	Weak	Average	Weak	Weak	Weak	Average	Strong	Strong
Goffi	Strong +	Strong	Average	Strong	Strong	Strong	Average +	Strong
Bolet	Average	Average	Strong	Average	Average	Strong	Average +	Average
Batouri-Danze	Strong	Strong	Average	Average	Average +	Average	Strong	Average +
Ngoungourou	Strong	Average	Weak	Average	Strong	Strong +	Strong	Strong
SCED-Ndelengué	Strong	Average	Strong	Strong +	Strong	Strong	Strong	Strong
Ndolobo	Average	Weak	Strong +	Strong	Strong	Strong +	Strong	Strong

2.1 LEADERSHIP

The authority of a village chief and elders, and their legitimacy amongst community members, is important at various levels. Traditional authority structures ensure community discipline in respecting a course of action the community has decided upon and these structures tend to create consensus amongst members whenever a difficulty arises. More importantly for a development program, the traditional governance structures generally guarantee that when problems emerge they can be addressed promptly by community representatives. Experience shows that silent, demure or “yes-man” types of leaders are not the most conducive agents of successful experiments in local governance. New experiments are evolutionary by nature and discussions and even confrontations are normal parts of a process to rectify a course of action, clarify intents, and dissipate rumors or misunderstandings. Yet, a strong and traditional Central African authority structures tend to facilitate debate, even when it may turn contentious.

Admittedly, strong leadership is a double-edged sword. The case of Bobi in Côte d’Ivoire shows how strong leaders can lead both to a full appropriation of a system even during the conflict years, when local committees kept on recording production and what little tax they earned although SODEMI had left the area illegally, but Bobi also was behind problematic confrontations with the government and the PRADD II project when in 2016 the village sought to strong-arm the government to allow them to mine a nearby Kimberlite dike.⁷ Strong local ownership works both ways.

Although it is presumptuous to assess the real level of community leadership during a few hours of meetings, the evaluation indicates in which village the AMPR program might have a better chance to nurture a fruitful dialogue with local miners through their leaders. For example, leadership is Sangouma was assessed as “strong” because the chief of village was clearly in control of the communication to outsiders, and had specific knowledge of mining sites, mining operations and mining practices. When the chief convened the focus group with the consultants, miners stopped and summarized what had already been said; then the chief challenged the consultants on technical details of the value chain, which enriched the conversation. Finally, when the discussion turned to operational details, the chief called on his “mining delegate” to produce updated registries on active mining sites, number of miners and other local data.

⁷ De Jong (2018).

In contrast, leadership in Ndolobo was assessed as “weak” because the local mayor does not play any role in the organization of miners, their deliberations or the routine checks performed on mining sites. There was no other proper chief of village in this community, either. This does not mean that the level of organization in the community was weak—on the contrary, as we will see below, Ndolobo enjoys an outstanding level of self-organization—but the design of a local governance program in this community would be challenged by the lack of efficiency and legitimacy of their ostensible leader.

2.2 LAND MANAGEMENT

Land management is an important criterion for it lays the ground for a governance system of a mining zone.

In all visited communities, the village limits are very clear and not contested. This characteristic is typical of a scarcely populated area where few villages border each other. These limits are actually located quite far from the village center, up to 50 kilometers in some cases. The limits of mining sites are also clear. When there is a conflict between miners over limits, the village chief states where the boundary is and how the conflict must be resolved.

The system of land allocation and the type of relations with outsiders varies from community to community:

- In Sangouma, Somica and SCED-Ndelengué, the land belongs to the first occupier but only if he is a village native.
- In Ngougourou, most of the village land is divided between the village families before occupation, but an outsider can work on unattributed land if he associates with a village native.
- In Sama I, the land is not divided and cannot be attributed to an outsider, but an outsider can work the land if he associates with a village native.

To understand these differences, it is useful to recall the relative recent settlement history in this region of Central Africa. The Gbaya ethnic group, which makes the majority of the present population in the villages of Carnot, Berberati and Nola subprefectures, has been itinerant for a long time. They migrated in the 18th century from an area located between the old Bornu Kingdom and the Bahr el Ghazal River (presently southern Chad and western South Sudan), due to Arabian and Nubian slavery razzias, moving towards the Adamawa Plateau in present day Cameroon. Throughout the second half of the 19th century, they fought against Fulbe transhumance pastoralist groups who also conducted slavery razzias, and by around 1870 migrated again to the plains of present-day CAR. Initially, they were mostly concentrated along the Ouham River Basin over a swath of land roughly comprising the hinterland of Bossangoa, Bozoum and Bouar. Relations with the French colonists severely deteriorated and from around 1920 to 1940, due to a cycle of revolts, evacuations and forced migrations, the Gbayas spread into many areas of Central and Western CAR including Berberati, Carnot and Nola. Today's communities are all sub-Gbaya groups stemming from these constant and violent movements. The Gbayas of the southwest, located around Berberati, Carnot, Gamboula and Nola, count at least seven sub-groups and make a population of around 220,000 people⁸.

Later, in the 1950s and 60s, semi-industrial diamond and timber exploitation by French companies attracted a new workforce from all over the country and created new villages. The communities of SOMICA and SCED, for example, still bear the name of the original mining company. However, the customary governance structure has remained Gbaya, as well as the local vernacular languages. From the 1960's onward, artisanal mining undertaken by locals further created new villages and hamlets. Most of these hamlets or sub-villages bear the name of the founder (such as Sama) and generally remain attached

⁸ Mendiguren (2012) p. 220-254.

to an original central village where the “land chief” originates. This customary system has merged with the administrative set-up and the central village is usually—but not necessarily—the “commune” of the area. For example, the villages of Sangouma and Sama have a customary link with the commune of Gboko, despite the latter being smaller today: whenever a new mining site opens in these villages, the site managers call the “land chief” of Gboko to sanctify the site. However, the villages of Goffi and Boulet are administratively attached to the commune of Nandobo without having a strong customary link to it.

The main observation here is that customary land tenure is not the nucleus of the Gbaya identity, contrary to many ethnic groups throughout the African continent. Anthropologists point out that the pivot of their social and political system is rather lineage (*nam*), which also means that their customary political power is much decentralized—one speaks of an “acephalous society.” This could be the result of repeated migrations or an inherent cultural trait. The land is known and attributed, but the methods of attribution, control and management differ from one community to another. Under such circumstances, a single zoning system would be difficult to implement.

Most visited communities—with the exception of Gboko and Batouri-Danze—have a “strong” or “very strong” land management system. This means that mining sites, including their limits, their owner and financier, are known, reported to the village chief, and sometimes even registered. All these villages are capable of stating how many mining sites are being currently exploited, where and by whom.

2.3 INTEREST AND MOTIVATION

The appetite for new systems of mining production, financing and management vastly differs from one community to another. As one observes increasingly in West and Central Africa, a generational gap between elders and youth is growing wider.

The consultants carried out focus groups to assess the community capacity of self-organization. In a context where pre-financing has dried up, the team asked about the interest and motivation of local miners to pool resources (labor, equipment, finances, etc.) to carry out mining independently. Moreover, in a context where mining governance has weakened, the consultants enquired about the level of interest of the community in sharing the state’s role of registering, controlling and monitoring local mining activities.

Previous studies had already indicated to the consultants how much reluctance there was in the Central African diamond sector to pool resources between miners⁹. The old, traditional diamond value chain financing mechanism relied exclusively on bilateral lending and borrowing relationships. The explanation behind such a system may reside in the need for strong trust between two individuals given the high risks of diamond mining. As in other commodity chains in Central and West Africa, building trust around commercial transactions is the core of the business enterprise.

What most miners said during the field assessment was that the political and economic crisis of the past years created a crisis of trust. Reportedly, it eroded the taste for risk and entrepreneurship. While in the past, even diggers used to share in the risk of production—in the form of a sharing the mineralized gravel or of the outputs of sales, in addition to a small daily stipend and food ration. Most miners today prefer to be employed as salaried diggers without a share “in order to make sure we will eat.” Economically, this trend is disastrous, for it increases the operational expenditure of a mining site. It also further accentuates the unbalanced distribution of wealth between diggers, miners and financiers in the case of a discovery.

⁹ Friedman, USAID (2008).

Artisanal diamond and gold miners are economically rational and fully understand this conundrum. However, when pressed on the subject, many protectively retreated to the hope that the “good old days” will return—that Buying Houses will come back with investments once the bad times finish. This was usually the moment when a generational gap appeared between focus group participants. While the older generation tended to stick to this hope, many younger miners voiced their opinion that those “good old days” are surely not going to come back and that, indeed, new methods are required.

What the comparative table of page 7 measures is the strength of this new generation within the community. The most impressive one was certainly SCED-Ndelengué where the enterprising youth, though silent at the beginning, entirely dominated the last part of the community meeting. Even though older leaders usually have a stronger voice in community affairs than young ones, artisanal mining remains an individual venture where every site manager decides for himself. It is thus possible to influence the youth without necessarily causing resistance from the old generation. At the same time, it is essential to maintain regular and truthful discussions with the traditional leaders to monitor that the “new system” does not create social conflict within the community. One key operational conclusion is that any type of local governance program by the AMPR program would require a change of mentalities and that behavioral change communication should be a strong component of the intervention.

2.4 PRODUCTION MANAGEMENT

This assessment dimension initially encompassed two equally critical elements:

- The production potential of the community, i.e. the capacity of the community zone to produce enough diamonds or gold to make local taxation sustainable (to fund the management committee, guards, etc.). It entails both the existing deposits, which was assessed based on past production levels (the consultant obtained this information from local collectors and regional mining directors), and the number of local miners and diggers available to work.
- The ability of the local mining community to declare its production, which is a requisite for fair and equitable taxation. This was assessed through the existence, or not, of other forms of local taxation. It was also thoroughly discussed with the miners and leaders of the villages.

These two aspects, however, proved to be very distinct. The production potential dimension tests the potential revenues a community could make out of its local mining production and is thus an economic indicator. The declaration potential, on the other hand, asks whether the community is, structurally and culturally, capable of setting up a system of internal declaration and monitoring on its own terms. The answer to the first question depends on the internal governance structure of the community and is presented in the comparative table below. The answer to the second question is clearly negative, as we will see below.

2.4.1 COMMUNAL MINING TAX

The diamond mining communities are well aware when stones of high value are discovered, and this illustrates how local communities monitor very closely their internal production. A sort of local mining tax is usually levied in the form of a gift to the village chief. Miners are expected to make a small gift to the village chief whenever a high-value stone (over 3-4 carats) is found, or when the site produces many small stones. The sum is symbolic and rarely exceeds 10,000 XAF (around \$20 USD). The frequency of the donation is up to the miner. As a cultural obligation, this practice is strongly linked to the cohesiveness of the community and the legitimacy of the leader. However, it remains indeed a donation and is not a proportional tax. As a customary redistributor of wealth, the village chief is never asked how he uses the money. The strength and regularity of this practice is summarized in the comparative table of page 7.

In addition, when the site owner is not the site manager, as in the case of outsiders backed by financiers, owners and managers decide on how to share production or revenue before opening the site. This, however, is more of a sharing arrangement than a tax. Attempts by the southwest Regional Mining Directorate to formalize this share between the owner and the collector through a contract seem to have failed and turned into the sole advantage of the collector, as miners in Goffi reported.

Finally, another tax-resembling practice is the collection of a sum from collectors by some communes, which as we wrote in section 2.2 does not necessarily bear a customary relation with the community. In fact, this tends to exist but not systematically, and was found only in communes such as Nandobo. Because all miners consider the tax as predatory, and because the economy is largely informal, collectors are usually those solicited by the commune mayors to pay this “communal tax.”

Unlike miners, the idea of a communal tax on diamond production is quite popular amongst commune mayors as well as local governance specialists, and has two main inspirations: the timber taxes regularly placed on concession timber companies, and the revenue-sharing system set in the 2009 Mining Code.

Timber taxes used to provide many communes in the southwestern forest area with revenues. Those revenues stemmed, on the one hand, from the revenue sharing system set in the 2008 Forestry Code, according to which a portion of the surface tax, felling tax, reforestation tax and export tax paid by timber companies was redistributed to the producing communes; and on the other hand, from a direct mandatory contribution of the timber companies to local development. The total of this financial return was estimated at around 1 billion XAF (\$2 million USD) per year before 2013. Despite the revenue-sharing system being considered slow and ineffective¹⁰, some communes did succeed in presenting correctly requests to support “community use programs” (*programmes d’emploi*) to the Ministry of Finances and in receiving, albeit irregularly, a share of timber taxes. This was the case of the commune of Nandobo, which used the revenues to build a couple of health posts in the nearby hamlets as well as a brand-new motel (owned by the mayor) in the commune’s center. Most of the local development projects and infrastructure came from the direct contributions of the forestry companies through the 10% “Contribution to social development” levy (*Contribution au développement social*). Nevertheless, communes did benefit from concessionary taxes in the forestry sector, which led many to wonder whether this could work in the mining sector as well.

There are a number of differences, however, between ASM and a logging economy. First and foremost, the existence of a company-owned concession has made revenue sharing possible in the forestry sector. The company, not the workers, pay the dues, meaning that the overall accounting and production system is fully integrated into the company’s business model. This eases monitoring by the tax-levying government institutions and accountability by the tax-paying entity. Despite a favorable legal framework and the assistance of many donors since 2008, no “community-owned forest” (*forêt communautaire*) has yet been successfully implemented¹¹. We remind the reader again that the “SODEMI model” in Côte d’Ivoire was based on a company-owned concession as well, even though taxes were paid by both the miners and the buyers, not the mining concessionaire company.

Another difference is the product itself. Timber is admittedly easier to trace and monitor than diamonds, since the latter are aggregated along the value chain and cannot be marked. Finally, the profitability of the revenue-sharing system for the timber companies is highly questionable. The aggregate tax for the logging industry in the CAR had reached 27%, by far the highest in the Congo Basin

¹⁰ PDRSO, Principaux constats et recommandations, Bangui, November 2018.

¹¹ Articles 133 to 139 of the 2008 Forestry Code, which were completed by Regulation no. 15/463 of December 2015, allow the possibility for a community to exploit timber within a “community concession.” This possibility is enshrined in the recognition of customary rights over forest products. A couple of communities in the Southwest and the Southeast are engaged, through the support of NGOs, in the set-up of such a system, but the system isn’t yet functional.

(the overall tax rate in neighboring Cameroon capped at 17%). Profits were marginal and when the 2008 crisis hit the industry, all CAR timber producers went bankrupt in a few years¹². A similar tax in the artisanal diamond economy could increase the risk of transnational smuggling.

The revenue-sharing system set in the mining sector by Article 121 of the 2009 Mining Code stipulates that 20% of the surface tax (*taxe superficière*) paid by mining companies and cooperatives must be transferred back to the producing sub-national administrations (*collectivités territoriales*). This system has never worked in practice, first because the communes never really understood how to apply to the “community use program” at the Ministry of Finance to trigger the intragovernmental transfer. Second, the communes have never known how much has ever been produced within their administrative territories. Furthermore, the amount of this tax should not be exaggerated. The surface tax rate set by Article 18 of the Mining Code is actually quite low. A reliable estimate shows that if all companies and cooperatives had indeed paid this tax in 2018, the country-wide surface tax would have generated a miniscule 11.5 million XAF (\$23,000 USD) to share amongst all producing communes.¹³

The idea of a communal tax, therefore, seems counter-productive and difficult to implement in the Central African artisanal mining sector, although with the increase in semi-mechanized permits given to companies and cooperatives, this becomes perhaps within the realm of possibility. It is also worth pointing out that there is no theoretical or empirical consensus in the specialized literature on what, between a centralized system of collection and a decentralized one, structurally works best for a given nation; nor what, between a highly prescriptive system of revenue sharing and a lack of specific redistribution, provides the best advantages to the people.¹⁴ African policy makers often argue that the revenues from mining taxation should serve the benefit of the entire nation rather than the locality from which mining occurs. This addresses an issue of concern long noted in other parts of the world – regional economic imbalances can be accentuated through returning taxes and royalties to the points of origin. Tanzania for instance, considered one of the best case studies in Africa for local development funded through mining revenues, instituted a fully centralized system of collection and does not discriminate between mining and non-mining communities in its intragovernmental mining revenue transfers.

2.4.2 LOCAL DECLARATION OF PRODUCTION

One of the key success factors in the SODEMI model of Côte d'Ivoire is the ability by community representatives to track and monitor production, which is grounded on the acceptance by producers to declare it or hand it over to community guards who are trusted to keep the stones until public sales days at least once a week. The general consensus amongst the visited communities in CAR is that this aspect of the system is not realistic.

The consultant discussed this point at length with miners and community leaders, pressing on all possible ways to make it palatable: a task force composed of community guards to monitor production (like in the SODEMI model), a transparent basket fund like in the Democratic Republic of Congo, a declaration of mineral finds to only a few entrusted persons in the community, the possibility to declare

¹² From 2008 to 2012, the state revenues from the logging industry has been cut by ten. See Smith (2012).

¹³ The estimate is based on the number of active mining permits and titles in 2018, provided by the Mining Cadastre. Their surface, which is not known, was arbitrarily set at the legal maximum of 62.5 hectare for the authorizations of artisanal and semi-mechanized exploitation and 100 km² for research permits.

¹⁴ ICMM (2009). Bahl & Wallace (2005) argue that communities in mineral-rich areas should be more compensated for the loss of non-renewable assets than other populations because of the strong social and environmental impact of mining at the local level and the necessity to invest locally in the adaptation to the future post-mining economy. Brosio (2006) argue that central governments are better equipped to implement countercyclical policies and deal with resource revenue volatility than sub-national governments because they have a more diversified revenue.

production after the sale, among other options. The amount of the tax did not matter: the consultant usually spoke of 100 XAF (\$0.2 USD) per stone, no matter its size. The possibility of only declaring the number of stones, without letting anyone know about carats, did not matter either. Everywhere, people are certain that it would not work even though traditional payments of reconnaissance are paid out to village chiefs.

Incidentally, the idea of local declaration is not completely new. PRADD I, in its 2012-2013 work plan, tried to accompany a few pilot villages to establish a “community production registry.” The objective at that time was to collect production data from certified mining sites in order to produce statistics, which would help prove the quality of deposits and increase the likelihood of diamond financing. The activity was thus geared to boosting individual production and not building community projects through local revenue. While the work plan was revised in December 2012 upon deterioration of the security situation in the southwest, but even then, the results in the first quarter of implementation were not promising. Upon review of the situation by the PRADD team, it found that reasons evoked for not registering diamond production revolved mostly around the “diamond culture of secrecy,” the reluctance to “turn a gift into a tax,” and the “fear of jealousy.” This may be viewed as contradictory to the practice of paying village chiefs a symbolic gift when a large diamond is found, but this ignores the reality that most diamonds are small in nature, and thus, easy to hide and sell without much acclaim.

Diamond secrecy, paradoxically, is not really a secret because diamond finds are generally open knowledge at the local level, but not higher up in the value chain. The entire diamond value chain, up to the traders of Antwerp and Gaborone and even in industrial production, is built on secrecy, by which we mean that the mass, quality and pricing of the goods are kept solely—and without a written trace¹⁵—between the seller and the buyer. Even the dealer of an industrial parcel does not know how much production comes out of the mining site. Diamonds are not normal commodities and deals are made on a case by case basis. Production and pricing are valuable and sensitive information. This is the reason why the whole value chain deeply relies on honor, tradition and family reputation. This rule is the same whether in Berberati or Beirut.

The reluctance to “turn a gift into a tax” comes from the assumption that the money offered by a lucky producer to the village chief is a moral duty, not a legal right. Miners want to have the cultural recognition of a fair and generous contributor, a purpose which a mandatory and systematic tax would defeat. While voluntary donors are gratified for their contribution, tax-payers would be criticized for not contributing enough, or less than others. Miners also rightfully pointed out that it would be unfair to them since hunters, farmers or fishermen in the community would not be taxed for community projects.

The “fear of jealousy” was probably the most solid source of reluctance. Even if miners admit that the lucky ones are always eventually known by other community members, they do not want them to know exactly how lucky they have been. This is a common cultural feature in many African societies whereby disclosing wealth can tempt covetous eyes and even the evil eye; indeed, many of the superstitions and beliefs around witchcraft revolve around this fear that a jealous person coveting what they do not have will use black magic.

From an anthropological perspective, this finding is not surprising. According to cultural anthropologists, the Gbaya people are characterized by their love for freedom and their deeply entrenched respect for individuality.¹⁶ Wealth is more perceived as an ability to provide for subsistence means within one’s lineage than a safety net to the community. Again, this could be said about many traditional African societies across the continent.

¹⁵ The customary way to seal a deal in the diamond business is to shake hands and pronounce the time-honored phrase “*Mazal bracha*.”

¹⁶ Mendiguren (2012) and Raulon-Doko (2001).

The case of the Ndolobo community is a noteworthy exception. Located in the prefecture of Mbaïki, the village of Ndolobo has gone through a major gold rush since 2015. The long-term residents of this community who used to pan gold in the river decided in 2015 to prospect for primary deposits within their village limits on the assumption (which proved accurate) that if the nearby large mining site of Bagandou produced gold, the veins should extend into their own village as well. Soon after the first discovery, the rush ensued, with miners from the whole country flowing into the community. The three initial prospection groups formed by the village youth became the nucleus of an outstanding self-organization, which as far as we know is nowhere else to be seen in the Central African Republic.

The gold deposit is located on the customary land of three village owners. Everyone can come to work at the site. In each property, groups of natives are associated into small monitoring teams who oversee mining operations. One “mining site management committee” comprised of 8 community members oversees the three teams. Whenever gold is extracted, the local team puts it into a sealed envelope, writes down the name of the site manager and the time of discovery, and brings it to the village committee “office.” At the end of the day, the manager comes to the office and confirms that the envelope contains his earlier discovery in the presence of monitors and committee leaders. The nugget is weighed in front of everyone. Then the manager goes to the nearby town to sell his product, comes back declaring how much he earned, and pays 25% of his earnings to the land owner. The land owner then remunerates the management committee (about half of what it received), which in turn cascades down to the monitoring team.

The system, which is quite similar to the “SODEMI model” in its operational application, is highly successful at various levels. First, it ensures peace, transparency and fairness for all miners. Let us remember that this system was set during very difficult times in CAR: in 2015 the transitional government barely had a police force or a sub-national administration. Yet no violence or coercion has ever been reported in Ndolobo. The rush also unfolded without any ethnic or religious discrimination. While Muslims and Christians pitted against one another in the nearby sub-prefecture of Boda, Muslim collectors were welcome in Ndolobo, and even Gula and Runga miners from the East came to work at the site.

Second, the system is highly conducive to formalization. After some time, in order to avoid harassment (*tracasseries*) by the police or the administration, the management committee and the land owners used some of the proceeds to buy a perfectly legal mining exploitation permit (*Autorisation d’Exploitation Artisanale*) for each of the three sites. The management committee also demands that miners pay their annual mining license (*patente*), although community members report that this is loosely enforced. In sum, it seems that the system works because everyone, including the state, gains something.

The causes and origins of the system are unclear. The team was unable to conclude why it works so well in Ndolobo when the nearby site of Bagandou, located only 12 kilometers away, is run relatively chaotically and without a management system. One explanation offered by community members related to their perceived “cosmopolitan spirit”: Ndolobo was created in 1967 by a logging company and never had a single ethnic composition. Indeed, even if village elders are consulted from time to time, the whole system relies on the local mining youth. A local tradition of self-organization may have been at play: Ndolobo members used to associate into agricultural and fishing groups (*groupements*) before they applied this tradition to the mining sector. Yet most villages in CAR have agricultural *groupements*, especially in the forest region¹⁷. No NGO or any type of external support accompanied the village youth either.

Other characteristics are clearly specific to the village of Ndolobo. First, the mining product is gold, not diamonds. Prices can easily be derived from weight and there is little culture of secrecy in the gold value

¹⁷ Focus groups findings. Also Friedman (2008).

chain. Second, most mining operations are conducted by outsiders, which naturally puts natives in a monitoring role. In the other visited communities, miners are the natives themselves, which explains the reluctance of having a neighbor as an inspector and tax collector. Finally, the deposit is bedrock, not alluvial, which significantly increases the likelihood of findings. The location of veins being more predictable, the operation is less risky.

The overall conclusion is that a collective, mandatory system of community taxation based on the declaration and/or monitoring of production in order to fund community projects is not feasible in Southwest CAR. However, as we will see in the next section, these discussions prompted new ideas amongst miners.

2.5 COMMUNITY INITIATIVE

We define this indicator as the capacity of community members to pool resources together to undertake any sort of enterprise servicing or benefitting the community at large. The discussions upon this point exceeded the scope of the mining sector.

Examples of resource pooling for community purposes in the Central African Republic do exist but are rare and irregular. For example, the community of Bolet levied enough contributions to build a local primary school with rudimentary materials. In Goffi and Ndelengué, young villagers agree, a couple of times every year, to perform free grass cutting and road clearing works. A few communities—Bolet, Sangouma, Ndelengué—call on their members from time to time to contribute for the stipend of the local “school teacher-parent” (*maître parent*, a teacher who is also a local parent). Most forms of collective contributions, however, are to be found within the boundaries of an extended family or clan (for weddings or funerals) or a neighborhood (for sickness).

Community contributions are thus not a priority. Explanations are both economic (these communities have deeply suffered from the ongoing crisis) and cultural, as discussed in the above sections. Contributions are only levied for a practical aim and specific need. The idea of a general basket fund for community projects did not sound very popular amongst community members.

The case of Ndolobo is again very informative. Despite the outstanding level of self-organization there, one crucial element of the “SODEMI model” is missing: community-level taxes and community projects. The mayor often appealed for such a contribution (the management committee built a new office for the mayor to resolve it), but community members simply confessed that it never crossed their mind. To them, the fact that village houses turned from wood and mud to bricks and corrugated tin was enough proof that the whole community benefitted from the gold site. When pressed upon the subject, committee members declared that they preferred to make donations to their church or their neighborhood as individuals, not as a committee. Again, a preference for individual generosity predominates in Ndolobo as in every other visited community.

This is not to say that these communities lack solidarity and cohesiveness, or that villagers are reluctant to work with one another. The practice of agricultural groups (*groupements*) is very much present: farmers pool money together to buy seeds or tools and pool labor clear the land on one another’s property. Labor pool arrangements have long been the basis of the agricultural systems throughout the country. Women also use a traditional savings and credit rotating fund (*tontine* in French, *kelemba* in Sango) to subsidize income-generating activities or to be used as a safety net. As discussed above, the Ndolobo youth used the *groupement* system for mining prospection, which at one point even included the purchase of a couple of metal detectors. The social and economic crisis may have weakened these practices, but they are still considered useful tools. In the communities supported by PRADD I such as Goffi, Bolet and Ndelengué, villagers remember that agricultural and fish-farming groups were successful before 2013.

While it may be possible for the AMPR project to support these practices and tentatively extend them to the mining sector, albeit with two important caveats. First, the savings bank, or basket fund, could not be used to invest in a mining site and replace the collector's pre-financing. Mining operations are simply too risky¹⁸. They could be used, for example, to subsidize the purchase of a mining license for group members, so they could avoid possible harassment by the mining brigade. It could also subsidize the purchase of small-scale mining equipment, after which the local association would rent the equipment at affordable prices to their members, following the model of the "equipment bank" (*mutuelle de matériel*) introduced in 2011-2012 during PRADD I in three pilot communities. Second, the composition of the association or *groupement* should be freely chosen between members, as opposed to encompassing the whole mining community. Free association chosen by the members itself is critically important, for like the *tontines* and age-old commercial relations, interpersonal trust is the key ingredient.

Community members particularly emphasized this point during the discussions. After it was clearly established that a full taxation and a basket fund for all would not work, some miners started exploring the possibility of creating *groupements* on their own terms and with the people they wanted to associate with. Their main fear vis-à-vis a community fund were "the spoilers" (*les réfractaires*)—those who would always try to sneak around and not pay their dues. They touch upon the classic issue of "free-riders." In SCED-Ndelengué, young miners went quite far in designing a mining *groupement* system which they imagined would consist of creating written statutes; setting-up a specific contribution per month, per stone or per carat; putting in place mechanisms to revoke the membership of a "cheater or spoiler;" and most importantly for the *groupement* to accept new members provided they accept the full conditions of membership. In Sangouma, miners also ended up suggesting that this could be the right way to go.

The team concluded that a taxation system and a basket fund can only work within the boundaries of trusted members who *freely* associate with one another. Most likely such structures would be built within extended families or clans, a practice successfully put in place in other African countries.¹⁹ A local governance vision may emerge from these small mining associations organically that could eventually absorb the majority of miners in a community. However, at present, the creation of a community cooperative participating in mine site monitoring and taking a percentage of first sales revenues for community projects is premature.

2.6 ECONOMIC DIVERSIFICATION

The existence of other, non-mining income sources enables community-based miners to substitute for the previous collector's pre-financing system. Since *kelembas* and rotating savings and credit funds cannot survive the high risks of mining investments, investment should come from other economic activities.

In fact, a proportion of the investment could be substituted by non-financial inputs. The table below considers what the traditional pre-financing actually funds to imagine what it could be substituted with.

¹⁸ Friedman (2008).

¹⁹ For example, in Madagascar farmers associations called Koloharena were set up by the USAID Landscape Development Interventions program along self-formed family affinity groups. These associations remain in place, over a decade after their creation, and some are involved in exporting red rice to the United States.

Funding Needs (Requisites in traditional pre-financing)	Possible substitutes (In the absence of pre-financing)
Diggers' daily stipends	Diggers' shares of findings or proceeds
Diggers' daily ration (food)	Agricultural support (income-generating activities at the household level)
Equipment and tools	Equipment and tools (in-kind) and rental system
Fuel for water pump	Not substitutable

To replace the traditional system of diggers' rations by agricultural support would require a serious change of practices. Instead of the site manager providing for every worker's food, each worker should provide for his own meals through agricultural plots worked by his household. In order to balance this effort, each worker should receive a percentage of the proceedings instead of a fixed salary. Other types of arrangement would combine a fixed salary with a percentage of the proceedings.

A rental system of equipment and tools worked successfully and profitably in three villages under PRADD I in 2011-2013. At the time, USAID supported the creation of local village associations that managed a pool of equipment under specific conditions: the management committee could only rent to association members who paid a small annual fee to acquire this rental right; association members had to be part of the community (to create social pressure in ensuring that the rented material would be returned); the rental fees were fixed at a small daily rate (based on utilization, for instance 60 days of use for a quality shovel); and the association used the profits generated by rentals to both replace or acquire new equipment and to provide a monthly stipend to the four members of the management committee (president, treasurer, manager and mediator). Other local arrangements can be found. The one important condition of success is to prepare the system (association statutes, membership conditions, rental fees, inventory and rental documents) before the equipment is actually delivered.

Miners would still need cash to invest in water pump fuel and to rent equipment, although the latter's cost can be significantly decreased. Fuel is indispensable on riverbank mining, but also sometimes on terrace deposits (*chantiers de carrière*) when the water table is reached. In Goffi for example, self-financed miners nearly gave up on riverbank mining for lack of cash for fuel.

This aspect underlines the necessity to assist miners to develop other income-generating activities, as they need to recover a level of subsistence before they can engage in any sort of associative savings.

The case of SCED-Ndelengué should be flagged, however, for a risk of unintended consequences. While economic diversification there is assessed as "strong," most of the non-mining income comes from hunting. However, Ndelengué is situated at the border of the Dzanga-Sangha National Reserve, so any economic support should be careful not to increase pressure on biodiversity.

2.7 ACCESS

This secondary criteria related to the operational feasibility to intervene in a community. Because behavioral change communication and economic support should accompany a program of local governance, long-term presence of mobilizers and frequent technical visits will be needed.

The security situation is relatively stable in all areas. However, this region of CAR can become volatile. Access was mostly scored on the basis on road conditions, which can also influence security. The communities of Sama I and Sangouma, which have both been assessed as "weak," as they can only be accessed by motorcycle.

2.8 SOCIAL COHESION

Social cohesion is defined as the level of mutual trust between community members or the state of cohesive social relations between members of a community. Social cohesion might emerge out of strong ethnic ties, such as in Goffi or Sama, or occur because of a local tradition of working together as in the diamond mining site of SCED-Ndelengué.

Weak social cohesion does not necessarily mean that self-organization is necessarily difficult or impossible to set up in the southwestern Central African Republic. In Ndolobo, where cohesion was assessed as “average,” the youth succeeded in setting up a remarkable system of monitoring mineral production and taxation. As discussed above, social cohesion within a community can be constructed with the assistance of external actors, but it is probably best to encourage the establishment of small and freely chosen associations (*groupements*) to absorb more community members and to grow into a local governance system.

3.0 POSSIBLE MODELS

3.1 PROPOSED EXPERIMENTAL SYSTEM

The key findings of this report lead to the conclusion that a model of local governance based on participative management of a localized mining zone in southwest CAR is premature at this time. Despite the interest of the USAID AMPR project to promote a local revenue taxation system, at present, the visited communities do not fulfill the minimum requirements of the core components of the “SODEMI model. The reasons for this are summarized here:

- The chief obstacle is the impossibility of introducing a mandatory system of declaration and monitoring for all local miners. During the discussions with the local communities, there is not only a reluctance toward a new model but a deeply entrenched belief, even amongst those who do see the benefits of such model, that it would soon collapse due to the influence of minority cheaters or free riders who would try to circumvent it.
- The diamond business, at every stage of the value chain, is built around a strong trust between a buyer and a seller. This trust implies a certain level of secrecy. Successful collective schemes can be built around the gold value chain (as in Ndolobo) but not diamonds. In this respect the case of Cote d'Ivoire is a rare exception that took years of persuasion and sometimes coercion by SODEMI to enforce conditions on the local communities. Only in other contexts with strong-willed chiefs and the presence of strong and honest state institutions can such transparent sales and payment of taxes on production be envisaged; CAR does not meet those conditions.
- Another obstacle is the fact that mining is mostly operated by the long-term residents of the local community. A system of monitoring diamond and gold production between people of the same community would run the risk of weakening internal social fabric. In Ndolobo, the only community where this system seems to work, it is interestingly similar to northern Côte d'Ivoire where most miners are outsiders monitored by long-term residents.
- Attempts by local communes to extract communal mining taxes are seen by local communities as predatory. This is due in part to the fact that mayors are not elected in CAR and are therefore rarely legitimate local leaders voted into office but rather national elites or puppets imposed by the national elite.
- The semi-successful revenue sharing system of the logging sector is hardly replicable in the artisanal and small-scale mining sector because the commodity is different as well as the scale. However, as semi-mechanized mining by outsiders like Chinese and others becomes more prevalent, looking at more formal local taxation arrangements or a national retrocession model may be appropriate, though beyond the scope of this study
- The Gbaya peoples value highly individuality and freedom. Community contributions and projects are not a priority. In other words, communities are arguably not communitarian by nature compared to other places in the Central African Republic, and indeed elsewhere in Africa where traditional chiefs hold a central economic and cultural role.

While it is not within the scope of this paper to seek what has made the “SODEMI model” effective in northern Côte d'Ivoire, it seems that a strong element of success is the presence of a company-owned concession. A private concession may ensure stability in resource production and help local miners abide by rules to their benefit. In the southwest of the Central African Republic, local miners hardly perceive the legitimacy of a self-ruled, community-owned concession. We also note that Tanzanian Artisanal Mining Zones are set up within the boundaries of private industrial concessions much along the lines of the SODEMI case. That said, it is not impossible to imagine a successful similar model in CAR. In

the successful Central African case of the Ndolobo gold site presented in this report, the arrangements seem sustainable because the operators of the property of three local land owners, which were legalized through Artisanal and Small-Scale Authorizations. Equally, miners in SCED-Ndelengué praised the successful system of diamond company SCED until 1978 because SCED bought all the production from individual miners. As in many diamond and gold mining areas, this highlights the importance of the authority traditional land owners may sometimes possess in structuring the use of both surface and sub-surface resources. Until traditional land owners are vested legally in full control of both resource domains, it is highly unlikely that similar models will be replicated elsewhere.

At the same time, many miners, especially among the youth, recognize that a new, innovative model of production is needed. This new model should support self-financing within local mining associations and follow the following principles:

- The locally understood notion of “*groupement*,” which is used in agriculture, can be the basis of a new mining model, as it was in the case in Ndolobo. The *groupement* does manage a collective savings or basket fund made of the contributions of members.
- Members of the *groupement* should *freely* choose one another. This should entail the possibility to revoke membership as well.
- The contribution system should be left to local members to decide. We would recommend them to include small fixed fees on production (e.g. 100 XAF per stone) straight from the beginning instead of, or in addition to, a regular fixed amount not linked to productivity. This would tie the success of the association to local production and further lead miners to work together. Production-based contributions can later increase and become more differentiated (contribution by carat, or blanket fees by type of stone) once the system is perceived as effective.
- The basket fund should not be used to invest in mining sites but in mining-related income-generating activities to substitute for mining investment posts: equipment acquisition and rental, fuel wholesale and retail, agricultural inputs, and other businesses.
- Another way to encourage resource pooling within the associations could be to subsidize the purchase of a legal license for one or two of the most entrusted members, so they can sell the production of the whole association to collectors and divide the proceeds later between producers. This would increase their negotiation power as well as the first sale prices.
- Local technical and communication support should emphasize the importance of social responsibility vis-à-vis the community as a whole, as opposed to mandate the *groupements* to pay for community projects.

The underlying hypothesis of this proposed model is that local mining communities—at least those which were visited—are cohesive enough to turn economic *groupements* into SODEMI-like governance systems in the long run. First, economic benefits would grow exponentially with the number of members, so miners would be increasingly tempted to recruit new members or merge various associations into one. Second, social and moral obligations combined with pride would increase the pressure on those associations to undertake community initiatives for the benefit of all, especially if association members represent all lineages in the village.

In sum, the proposed model is not one of local governance, which relies on the premise that a system applies to all, but points toward the organic growth of an economic structure composed of freely associated miners structured around a common purpose – to mine minerals for personal benefit.

This economic model would have the advantage of being easily replicable, hence sustainable. Whereas the chances of failure are too strong in a governance system applied to all, an economic *groupement* would still benefit some miners even if it does not encompass everyone.

The priority locations for such an experiment should be up for discussion between AMPR technicians, as all communities have stronger and weaker features relative to one another. Personally, the consultant was impressed by the potentials of the communities of SCED-Ndelengué (Nola), Goffi (Berberati) and Ngougourou (Nola).

3.2 LONG-TERM GOVERNANCE STRUCTURES

The nature of geographic governance structures in the mining sector, or systems of governance applied to a specific mining zone, can still be investigated even if they do not respond to the immediate problems of mining communities. Two possible structures are presently available in the mining legislation: mining cooperatives and Artisanal Mining Zones (*Zones d'Exploitation Artisanales* or ZEA).

3.2.1 MINING COOPERATIVES

The system of mining cooperatives set since 2004 in CAR is probably one of the most advanced on the continent. The biggest innovation is the possibility for them to export their production directly on the international market, provided the export value of a parcel exceeds 20 million XAF (\$40,000 USD)²⁰.

The creation of a mining cooperative brings other substantial benefits. When it operates on an Artisanal and Semi-Mechanized Exploitation Permit (Permis d'Exploitation Artisanale Semi-Mécanisée or PEASM), a cooperative can be exempted of import taxes over small-scale and semi-industrial mining equipment. A mining cooperative also fulfills the terms of the Organisation pour l'Harmonisation en Afrique du Droit des Affaires (OHADA) and can thus also operate as a trading or agricultural cooperative, which provides strong potentials for economic diversification and risk-hedging. It can acquire up to five Authorizations of Artisanal Exploitation (Autorisation d'Exploitation Artisanale or AEA) against two for individual miners. Finally, they used to benefit from a smaller export tax rate than other exporters (9% against 12%). Since the 2016 fiscal reform the same rates now apply to all exporters (6.75% on diamond and 6.25% on gold) but it would be in the spirit of the law that cooperatives have a smaller one.

Mining cooperatives could become the long-term vision of a burgeoning *groupement* of local miners, resulting from an association's organic growth. However, they would need to be supported and organized. The main benefit of a mining cooperative is the possibility of direct exports, yet this can only occur when a cooperative knows enough of the international diamond market to trade with a foreign partner. The added value of a Buying House (*bureau d'achat*) is not only to source goods from many different producers (cooperatives instead can only sell what they produce), but also to know the intricacies of the international demand, along with the names and interests of specialized traders, cutters and retailers. As only few cooperatives would produce enough volume to interest foreign traders (aside from the finding of an exceptional stone, of course) an association between a cooperative and a buying house is more likely.

When it comes to securing subsurface rights, however, cooperatives are not very well equipped by the legislation. The Authorization of Artisanal Exploitation (*Autorisation d'Exploitation Artisanale* or AEA) does not confer exclusive mining rights: it has the status of an “authorization” and not a “permit”.²¹ The

²⁰ Articles 144 and 178 of the 2009 Mining Code.

²¹ 2009 Mining Code, Chapter I, Definitions.

Ndolobo miners who operate on three AEA are protected against legal harassments but not necessarily against the acquisition of a mining permit by an individual or a company.²²

The PEASM²³ does confer exclusive mining rights for a renewable period of three years over a maximum surface of 1 km²—a cooperative can thus assert its rights over a maximum surface of 5 km²—but this places the cooperative in an operational conundrum. The acquisition of a PEASM is lengthy and expensive and can only be profitable over a rich deposit. Yet most ASM operations do not know whether the site will be profitable before they actually work the site. Indeed, most of sites are not profitable. The bottom line is that diamond mining is a highly speculative endeavor. Unless the permitted area is known to have a primary deposit, or in the case of a specific river known for its rich riverbed alluvial deposits, a 5 km² surface area is not large enough for an ASM cooperative to take its chances over a yet unmined area.

3.2.2 ARTISANAL MINING ZONES

While the Central African legislation offers the possibility to create Artisanal Mining Zones (ZEA), no ZEA has ever been set up by the authorities. This represents both an operational limitation as well as an opportunity. Article 64 of the Mining Code specifically states,

When the technical and economic characteristics of certain deposits of stones, precious and semi-precious metals or any other mineral substance do not ensure the possibility of an industrial or semi-mechanized exploitation, but allow artisanal exploitation, the Minister of Mines, upon report from the Director General of Mines and the relevant administrative authority, establishes by ministerial decree (Arrêté), within the limits of a defined geographical area, an artisanal mining zone.

The legal establishment of a ZEA and its interpretation by the mining authorities are subject of many discussions:

- While an AEA can be requested by an individual or cooperative, a ZEA established by the Minister of Mines seems to automatically confer an AEA over the area. It is not clear who the beneficiary of such an AEA is or could be. Another interpretation could be that the acquisition of AEAs would still be needed within the ZEA—but in this case, what is the use of a ZEA?
- While an AEA acquired by an individual or a cooperative has a maximum surface area of 62,500 m², the surface of a ZEA is not defined.
- A ZEA can only be set up over an area that does not contain industrial deposits. The way MMG technicians usually interpret this clause is that the Directorate of Prospection and Research (Direction de la Prospection et de la Recherche or DPR) should undertake rigorous geological analysis to ascertain that deposits are indeed not industrial before considering the establishment of a ZEA. This is one of the reasons why the MMG regularly includes large-scale geological research in its strategy papers, although it has never been funded.

²² In fact, this assertion should be nuanced. Research Permits (Articles 19-30) and Industrial Exploitation Permits (Articles 31-41) can be delivered without local community consent, but the delivery of a PEASM supposes a “public investigation [...] after consulting competent administrative authorities and affected local communities” (Article 42). In addition, even if the surface of a Research Permits can overlap with this of an AEA, the acquisition of an Exploitation Permit confers “a right to compensation” to the AEA beneficiary (Article 68). The amount of, and the ground for such compensation (value of surface land or subsurface deposits?) is not specified. In practice, unless the Ministry of Mines rules otherwise, the legislation thus offers enough leeway to justify at least a legal proceeding.

²³ Articles 116-152 of Regulation no. 09.126 or Application Decree of 2009 Mining Code.

Because the ZEA is only loosely quoted in the Mining Code and that regulatory decrees have not been passed to clarify its roles and limitations, it is the consultant's opinion that ZEAs could become the basis of a geographic governance of mining zones in which local communities could participate. Such a policy would not need a lengthy legal reform but only the development of a new regulation.

The chief benefit of a ZEA policy would be to protect the rights of artisanal miners vis-à-vis semi-industrial foreign companies whose presence is growing exponentially since 2014. It would not address the immediate problem of traceability and production, which as discussed above would be better dealt with the creation of grassroots mining associations.

Following the framework set forth in the Mining Code and their interpretation by MMG technicians, the features of a ZEA policy should explore the following points:

- In the absence of large-scale geological research in the short- or medium term, ZEAs should be established without the previous knowledge of an industrial deposit. In addition, the regulatory texts should clearly define what an industrial grade deposit is, because there are no primary deposits for diamonds in CAR, and for gold the fact that a deposit is hard-rock versus alluvial does not necessarily make it industrially viable.
- To comply with the prospecting spirit of the law, artisanal and small-scale operators should submit samples of their mineralized gravel (after processing and diamond extraction) to the mining authority. A systematic analysis of those samples by the DPR would help the MMG determine the indicators of possible industrial deposits, once properly defined. This might help the MMG to further advance its knowledge of subsurface minerals in the absence of major investment in research. The MMG could advertise its findings to the private sector for more in-depth exploration.
- Sampling and physical/chemical analysis can also be used for health and safety purposes. A ZEA could be closed if samples indicate a strong presence of lead or uranium, for example.
- The ZEA should be established for a short, renewable time, such as the two-year period of an AEA. If an industrial deposit is found, the ZEA would not be renewed. Article 64 of the Mining Code also states that an AEA can be immediately closed if “a new deposit not falling under artisanal mining has just been discovered.”
- The nature of such a “non-artisanal deposit” should be clarified. Hardrock gold deposits, for example, can be profitably operated by artisanal means without damaging the core deposit if it is limited to a certain depth. This is how Tanzanian ZEAs work within company-owned permits.
- Artisanal and small-scale operations should be clearly separated. Today's companies often hide semi-industrial operations under a small-scale (semi-mechanized) permit. The ZEA should be reserved for artisanal operations. Small-scale operations should apply for a PEASM within the ZEA, which as discussed above supposes the consent of “affected local communities” (Article 42 of the Mining Code). There should be clarification, however, as to the extent of semi-mechanization allowed in artisanal mining zones, otherwise artisanal miners will not be able to improve their production techniques and in some cases transition towards small-scale.
- The local community bearing customary rights over the ZEA area should be involved in the monitoring of the ZEA. The details of this monitoring can stem from an interpretation of Article 15 of the Mining Code, which mentions “local customary rights.”
- Details on compensation in case of the acquisition of an Industrial Exploitation Permit (Article 68) should be clarified, for example, on the basis of the average profitability of ASM operations. More generally, given that ASM license-holders or site managers (*chefs de chantier*) tend to be the site owner as well, protecting their rights in the case of outside mining is important, and

revisiting the certification of sites piloted under PRADD I could help determine how best to do so.

4.0 CONCLUSION

A model of local governance based on participative management by a local community and mining authorities, as inspired by the Ivorian experience, is premature for the time being in southwest Central African Republic. The minimum requirements to comply with the core components of the “SODEMI model” are not present in the visited communities.

The main obstacle seems to be around the difficulties of implementing a tax-levying system for *all* miners. Several deeply engrained economic and cultural factors are at play which impedes this self-taxation system.

Rather than trying to fit the Ivorian model to the CAR context, it may turn out that miners would be willing and at times eager to set up informal associative structures (*groupements*) inspired by their experience in agriculture. The key SODEMI elements of production declaration, tax levying, monitoring and basket fund would be acceptable within the boundaries of one or more groups composed of freely associated members.

A local governance scheme, where all community members without exception are ruled by the system, does not seem feasible. However, in the longer term, successful mining *groupements* may have the potential to grow organically toward absorbing most of the mining population in a community and redistribute funds as a moral duty in the form of community initiatives. This would require the construction of strong local cohesiveness between villagers as well as accompaniment by the right external support. The necessary support should prioritize economic training and inputs, as non-mining income-generating activities are needed to substitute for the present lack of traditional pre-financing, and the likelihood that a lack of pre-financing will persist in the future. It would also require a strong component of behavioral change communication, as nostalgia for “the good old days” predominates especially amongst the older mining generation.

Decentralized governance in the artisanal and small-scale mining sector is quite a difficult challenge. Despite the interests of the USAID AMPR project to experiment with a model built on many principles of the SODEMI experience in Côte d'Ivoire, experiences in Ghana, Kenya and the Philippines show how decentralization in the artisanal and small-scale mining sector is not necessarily conducive to formalization and economic competitiveness vis-à-vis the illegal chain of custody. In many cases, forced decentralized governance models can envenom an informal yet legitimate economy due to the local predation and corruption that emerges within these structures. Given the present dynamics in the Central African diamond sector, it is more appropriate to nurture and support local *groupements*.

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