

Land access rights in minerals' responsible sourcing. The case of cobalt in the  
Democratic Republic of the Congo.

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## Abstract

Artisanal miners' access to economically and geologically viable lands in the Democratic Republic of the Congo (DRC)'s Copperbelt region is a core limitation to responsible cobalt sourcing programs. First established to respond to sourcing risks such as child labor and poor working conditions, responsible cobalt sourcing programs need to increase their scope to root causes. In this article I argue that with the increased attention on responsible sourcing of cobalt, actors across the supply chains should address land access rights issues to effectively tackle reputational risks. These risks affect the image of brand companies which then trickle the responsibility of addressing them down their supply chains. Commodified lands, distributed to private actors through concession-making, led to a highly competitive relationship between artisanal and industrial miners. The absence of available land now prevents the establishment of sustainable responsible sourcing programs. Building on Hilson, Sauerwein and Owen's concept of autonomous coexistence and recognizing the importance of context-sensitivity, I introduce the possibility to define *autonomous cohabitation* as an avenue for ensuring that artisanal miners securely access economically and geologically viable areas on industrial concessions in the DRC. I argue that companies involved in responsible sourcing programs should aim to develop autonomous cohabitation between

ASM and LSM, in which long-term agreements, secured by the DRC state and its newly established monopoly, the *Entreprise Générale du Cobalt* (EGC) ensure that land could be shared under specific legal terms, while the production would be sold to the monopoly established by EGC. Taking the example of two responsible sourcing programs, the Mutoshi Pilot Project (now inactive) and Better Mining, I argue that the current interest in visible risks hinders the capacity of these programs to successfully tackle root causes, including land access rights.

Keywords: responsible sourcing, cobalt, land use, artisanal mining, DRC, sustainability

## 1.1. Introduction

For decades the competition for land access between artisanal and industrial miners has been studied and flagged as a core conflict driver in minerals-rich regions of the Global South (Aubynn 2009; Ribeiro-Duthie et al. 2017; Pedersen et al. 2019). Particularly salient and visible in the gold industry, due to the importance of artisanal gold mining, this relationship is now clearly identifiable in the Congolese Copperbelt, in particular in relation to cobalt extraction. In 2019, tensions exploded into open violence at the Kamoto Copper Company (KCC) and Tenke Fungurume Mining (TFM) mine sites as the companies requested the intervention of the army to dislodge artisanal miners (Ross 2019; ICG 2020). Informed by stakeholder interviews and in-depth literature review, I intend to engage in the growing field of sustainability studies by bringing a novel aspect defining responsible sourcing programs.

The DRC supplies around 70 percent of the world's cobalt (Darton Commodities Limited 2021), of which 15 to 30 percent are extracted by artisanal miners (Baumann-Pauly 2020, 3). In the past few years, cobalt has become one of the most sought-after minerals as it powers lithium-ion (Li-ion) batteries and the *green transition* to a fossil fuel free economy.

As cobalt's demand is expected to nearly double between 2020 and 2030, from 141,000 tonnes to 270,000 tonnes (Desai and Nguyen 2021), the sector is marked by an increasing competition, reverberating tensions between large-scale mining (LSM) and artisanal operators. In parallel, pressure from non-profits, investors, customers, clients, and to a lesser extend regulators led companies to develop new approaches, including responsible sourcing projects, to manage reputational risks. Child labor and occupational health and safety (OHS) have been core topics in this conversation. Nevertheless, until today, little has been done to tackle root causes, first of which access to economically viable lands (IN-IO-003-05032021; IN-IO-004-05122021; IN-CS-003-05182021; IN-CS-002-03182021; IN-CS-001-02222021).

This article aims at introducing a link between artisanal mining, industrial operations, responsible sourcing concerns and land access rights. Inspired by existing scholarship on artisanal and small-scale mining (ASM) formalization (Hilson 2020; Spiegel and Viega 2009; Hilson et al. 2017) and ASM/LSM interactions (Hilson, Sauerwein and Owen 2020; Kemp and Owen 2019; Spiegel 2016), I introduce the responsible sourcing paradigm as a driver of change in the field. Interestingly, it appears that land access rights, from a customary, as well as legal standpoints, have been largely ignored by responsible sourcing programs in the DRC's Copperbelt. This is in part the consequences of a focus on "emotional risk"<sup>1</sup> (IN-UC-002-0302202; Glencore 2021) that do not entirely reflect the on-the-ground realities of cobalt sourcing, and simplify the issue to visible risks (i.e. the presence of children at sites, the absence of personal protective equipment, etc.). However, I argue that it also translates a lack of information and understanding of the dynamics of inequalities in a region with a complex history of land access rights. While this article does not explore the customary land access rights systems, it lays the ground for future in-depth analysis of the topic.

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<sup>1</sup> Here, I am not arguing that child labor or work-related injuries are only emotional. However, I believe that corporate response to these risks was the result of an emotional reaction from the public.

Responsible minerals sourcing is core to corporate sustainability, in particular in the context of the Sustainable Development Goal (SDGs). However, the concept of corporate responsibility is born in the 19<sup>th</sup> Century with a paternalistic approach to the workforce (Smith 2003; Rubbers 2013). However, the increasing pressures on companies to tackle abuses in their supply chains led in the last decades of the 20<sup>th</sup> Century to a growing attention from downstream end users on the behavior of their suppliers (Guo, Lee and Swinney 2016). Responsible sourcing is often included in Sustainable Supply Chain Management (SSCM) (Pagell, Zhaohui and Wasserman 2010), itself defined as the “manag[ement of] all aspects of the upstream component of the supply chain to maximise triple bottom line performance” (58). Built on voluntary and mandatory requirements, the concept of responsible sourcing mirrors corporate interests more than real improved practices (Deberdt and Jurewicz 2019; Deberdt and Le Billon 2021; Taka 2014). The term CSR has become a buzzword in the industry and refers to broader goals achieved through a variety of approaches (van den Brink et al. 2019, 38). It is solidified by a set of internationally accepted codes, standards, and frameworks such as the OECD *Due Diligence Guidance for Responsible Minerals Trade from High-Risk and Conflict Affected Areas* (OECD 2016). The OECD define responsible sourcing as “the process enterprises should carry out to identify, prevent, mitigate and account for how they address these actual and potential adverse impacts in their own operations, their supply chain and other business relationships” (2018, 15). Hence, responsible sourcing is included in Corporate Social Responsibility (CSR) practices. CSR has also been widely criticized as a withdrawal of the state resulting in what Hönke described as a “rhizomatic statehood [with] personalised, asymmetric networks, delegating the rule of subnational territories to intermediaries [corporate actors]” (2010, 108). In minerals supply chains, the “blood diamonds” campaign and the Kimberley Process Certification Scheme (KPCS) kickstarted interests in corporations addressing the worst human rights abuses in their supply chains (Sherman 2000; Bieri 2010).

The first decade of the 21<sup>st</sup> Century brought the “conflict minerals” campaign. Codified in the 2010 US Legislation Section 1502 of the Dodd-Frank Act and later on in the European Union’s Regulation 2017/821 (Deberdt and Le Billon 2021; Sarfaty 2013; Sarfaty 2015; Kim and Davis 2016; Dalla Via and Perego 2018), the campaign centered around the DRC and facilitated the later focus on cobalt.

The securitization of tenure is a critical topic in the formalization discourse under way for years. Ofori, Mdee and Van Alstine highlight how the formalization narrative is disconnected of the realities of sub-Saharan Africa’s ASM industry by analyzing the micro-politics of state-society interactions (2021). This is also discussed by Hilson et al. in the Mozambican case where bureaucratic processes impede on the ability of individual miners to secure lands and access (2021). This article find inspiration in these studies and bring an innovative perspective on a specific case, the Congolese Copperbelt. Artisanal miners in the region face challenges that prevent their access to land, and the criticality of the cobalt supply will only increase their vulnerability. As Pedersen et al. address in their study of artisanal gold mining in Tanzania, the ore depletion, and the forceful diversification of livelihoods is also a core topic of tenure security and access to land (2021). Hence, as discourses and policies increasingly focus on formalization efforts, these strategies should embrace new paradigms reflecting current and future challenges faced by the industry. Land tenure and land access is one of them and resides at the center of the issue of ASM sustainability and responsible sourcing (Hilson 2020; Veiga and Marshall 2020; Vogel, Musamba and Radley 2018).

Based on a detailed literature review of academic, non-profits, international organizations, governmental and industry documents, this article is also supported by a series of 22 online interviews with stakeholders involved in the artisanal cobalt sector. Invitations to the interviews were sent to a group of corporate actors central to the cobalt industry as downstream consumers (technology and auto sector), midstream actors (refiners and traders),

and upstream producers (mining companies). All corporate respondents occupy positions in the corporate social responsibility and supply chain sustainability fields. Additionally, implementers of responsible sourcing programs such as governmental organizations, non-profits, and service providers were asked to participate the study. Civil society representatives and government officials also answered my questions, with a specific interest in ASM formalization. Invitations were sent to 35 individuals, of which 22 answered positively. Interviews were then conducted online for 21 of them and one answered in writing. While a questionnaire was defined, interviewees were given a free space to discuss the topic. Finally, this research is also informed by informal conversation with actors in conferences and other gatherings I participated in.

The research leading to this article was conducted during a time of significant challenges to the artisanal sector as the COVID-19 pandemic swept throughout the globe. The research itself was impacted by the pandemic as interviews were conducted online, limiting the access to artisanal miners themselves. While not central to this discussion, the coronavirus disease holds devastating effects on the ASM sector. Supply chain disruptions, quarantining measures, and lockdown policies prevented usual business and limited the miners' ability to sell their production (Zhu et al. 2021). As Hilson et al. argue (2021), these impacts are situated "primarily within structural predicaments, especially in terms of unsustainable economic growth models focused on large-scale resource extraction and a broader rural/agricultural crisis" (Pijpers and Luning 2021, 1), highlighting once again the necessity to reconceptualize our approach to ASM. Case studies have explored the impacts of the pandemic on specific minerals and countries (Muthuri et al. 2021; Calvimontes et al. 2020). As the DRC's Copperbelt is at the heart of minerals supply chain sustainability initiatives, the region should provide important learnings on diseases impacts and mitigation in responsible sourcing strategies.

This article is not in-depth analysis of customary and legal land access rights in the Haut Katanga and Lualaba cobalt-rich provinces. However, it argues that the industry should bring increased attention to access to land when developing responsible sourcing programs in the DRC and beyond. In parallel, this research opens avenues to explore for an academic audience, particularly in terms of what Hilson, Sauerwein and Owen coined as the “autonomous coexistence” (2020) between artisanal and industrial miners. The case for autonomous coexistence is based on a critique of current discourse implying that LSM should ‘allow’ ASM miners on their concessions. This “short-sighted, far-fetched and untenable” (ibid., 1) developmental narrative fails to account for the fluidity and ever-changing nature of the mining industry. The authors argue for a legal and physical separation of the ASM and LSM industries as a mean to secure economic and developmental long-term benefits from the artisanal sector. However, with this article I intend to highlight the limitations of the autonomous coexistence paradigm. I embrace the specificities of the Congolese Copperbelt in arguing that the heavy commodification of land through concessions and land leases do not allow for a (legal) ASM access to geological and economically viable land.

I begin this article with an assessment of the artisanal and industrial relationships in the cobalt sector, pointing in particular to dynamics of exclusion and the lack of viable artisanal mining zones. Moving from this perspective, I introduce two international responsible sourcing programs, Better Mining and the now defunct Mutoshi Pilot Project and points to their limitations in terms of land access rights. Better Mining is a mineral agnostic program providing on-the-ground monitoring and incident reporting to its member companies. The Mutoshi Pilot Project differed from this approach as a hybrid program supporting miners’ formalization through capacity building and providing on-the-ground

health and technical assistance. I then address the *Entreprise Générale du Cobalt* (EGC), the newly established governmental monopoly on artisanal cobalt buying and selling, and its potential impact on the core issue of land access rights in responsible sourcing approach. Finally, I discuss the existing disconnect between responsible sourcing and land access rights and explore the possibility for what I coin *autonomous cohabitation*. Autonomous cohabitation could take the shape of long-term agreements, secured by the DRC state and its newly established monopoly, the *Entreprise Générale du Cobalt* (EGC) ensuring that land is shared under specific legal terms, while the production would be sold to the monopoly established by EGC. These specific legal terms would allow ASM and LSM operations on existing industrial concession, hence avoiding a complex and likely costly complete reorganization of land ownership (and leasing) in the region.

The current limitations and critiques of the responsible sourcing paradigm highlight the short sightedness of corporate actor policies, and the inability of the DRC's government to properly establish a holistic legal system when it relates to land access rights in the Copperbelt region. This article is inscribed in the critique of greenwashing strategies and aims at starting a conversation in academic, industry, and governmental spheres to address core issues defining responsible sourcing of raw commodities by the same companies promoting responsible cobalt sourcing.

## 1.2. Land-based resource access rights

In this article, I argue that an important limitation to the sustainability of responsible sourcing programs in the cobalt sector (and by extension most minerals) lays in the lack of engagement on land access rights. This part discusses the rights to access productive lands from an artisanal mining perspective and presents existing research in this sphere. Bringing

examples from other African regions, as well as conflictual dynamics between mining and subsistence activities, I hope to highlight the complexity of land access rights.

Through this study, and supported by the interviews I conducted, I contend that the integration of access to land rights in responsible sourcing programs would spur positive and lasting change for the artisanal and industrial sector. Importantly, I do not argue for a privatization of these issues, as legal texts already exist but lack applicability or, when suited, are not appropriately applied. This lack in alignment with legal requirements is often linked to the disconnect between the on-the-ground realities of artisanal and industrial mining relationships. Hence, a new paradigm in responsible sourcing programs needs to be defined to effectively address these issues. This article also recognizes what Fairbairn describes as the role of “inequality within host countries [as they] may condition foreign access to land” (2013, 337) and the limited flexibility private companies hold in already established political, legal, and economic contexts. However, I bring to the fore the collaborative role of industry, non-profits, and other international actors in supporting the DRC government in defining land access systems inclusive of artisanal miners.

Throughout sub-Saharan Africa, land tenure, in particular related to mining activities, has been the subject of contentious politics. Conflicts between mining activities (industrial and artisanal) and subsistence activities have been described extensively (Hilson 2002; Shackleton 2020; Malone, Smith and Zeballos 2021; Mtero 2017; Verbrugge, Cuvelier and Van Bockstael 2015). In this article, I explore the conflicts between industrial and artisanal miners when it relates to the rights to access productive ore deposits. However, research in related fields bring important lessons.

Nyame and Blocker highlight the transactional nature of land distribution in the ASM sector of Ghana (2010). The trading of available lands by local landowners favors the development of illegal mines and, as they argue, constitutes a significant limitation to

formalization efforts by the government or international actors. The fluidity of land ownership in the context of Ghana is an important dynamic of land dispossession, undermining the potential impact of mining for sustainable livelihoods (Andrews 2018). This trend is also uncovered in Cote d'Ivoire where Van Bockstael describes the agency of landowners in their transactional relationships with artisanal miners coming from all over West Africa (2019). As they illegally confer land to ASM operators, landowners play a significant role in the negotiated nature of the industry. While I do not explore traditional land access rights in the case study laid out later in this paper, Van Bockstael raises important findings in this field that could open new avenues of analysis in the DRC case study as well. In the two cases of Ghana and Cote d'Ivoire, ownership to the land is retained by individual or community landowners. In the case of the Congolese Copperbelt, as illustrated by Map 1 below, the concentration of concessions greatly limits this possibility, and land access is dependent on authorization by the concession owner (usually a company or powerful political actors).

Embracing a Geographic Information System (GIS) approach, Mitchell argues that “there are significant overlaps between mining concessions and pre-existing forms of land tenure”, which in turn “can push pre-existing land users to the margins of land access” and spark conflicts (2016, 1). This is a particularly appropriate lens in the case of the DRC’s southern provinces of Lualaba and Haut-Katanga. Importantly, the concessionary model used by many African governments, including Kinshasa, needs to pay increased attention to the historical fluidity of land rights and increase their understanding of pre-existing land access rights.

Historically, the post-Washington Consensus favored the development of policies promoting industrial mining as a means for development (Canel, Idemudia and North 2010; Hilson 2019). in regions where artisanal operations were already thriving. Through the

International Monetary Fund (IMF) and the World Bank's loans and support to deregulate markets of raw commodities in countries of the Global South (Hilson, Saerwein and Owen 2020), an increased competition for securing private concessions occurred as the reforms fueled the expansion of artisanal operations. Banchirigah identifies three dynamics at stake in this process, including the increased unemployment spurred by Structural Adjustment Programmes, the decrease of land availability for farming and legal ASM, and finally the increased bureaucratization of ASM formalization as disincentive to join the legal system (2006, 1). While the first dynamic is well beyond the scope of this paper, the remaining two provide historical lessons to address the issue of access to land rights for artisanal miners in the DRC. In this regard, the mining code introduced in 2002 under the aegis of the World Bank produced very similar outcomes, including the fall of the public miner Gécamines and the distribution of land owned by the company through sale or concessions to private actors (more information is available through Rubbers 2013, 49-53).

This brief introductory part allows us to replace the issue of land access rights at the core of mining dynamics in Africa (and beyond). In particular, I bring the concept of fluidity of land access rights in current and historical contexts, and the need to integrate these learning to current models of formalization. While this paper does not focus on the broader topics of ASM formalization, the question of access to land rights is inherently linked to the legality of artisanal operations, and in the context of responsible minerals' sourcing, will define the long-term success of these programs.

### 1.3. Artisanal and industrial relationships in the cobalt sphere

For decades now, the relationship between artisanal and industrial miners has been a critical point of contention in the Congolese Copperbelt region (IN-UC-002-03022021; Prause 2020; Sovacool 2019). While widely ignored, spikes of violence regularly replace the issue at the

core of the corporate agenda, and in 2019 clashes between security forces, the military, and artisanal miners around TFM and Glencore's subsidiary concessions sparked condemnation of the use of excessive force (Amnesty International 2019; Ross 2019). While research has shown the dynamic of violence during the expansion of LSM operations (Stoop, Verpoorten and van der Windt 2019; Stoop and Verpoorten 2021) and the relationships between politico-military actors and mining companies (Verweijen 2017). However, these studies center on the conflict-ridden eastern province of the DRC, a significantly different context than the Copperbelt. Despite the increasing violence in Congo's southeastern corner, only sporadic research has been conducted on the topic (Nkumba 2020; Katz-Lavigne 2020; IN-R-002-04192021).

The Congolese artisanal cobalt industry can be differentiated between miners operating on industrial concessions, miners extracting on concessions outside of industrial zones of operations, and miners working in *Zone d'Exploitation Artisanales* (artisanal mining zones, ZEAs). Only the latter is recognized by the 2018 Mining Code, and as such is fully aligned with the legal requirements of the Congolese law (Deberdt 2021a). In this part however, we explore the tensions resulting from the presence of artisanal miners on LSM concessions, a situation considered illegal in the eyes of the law and vilified by international standards on responsible (cobalt) sourcing.

Concessions held by industrial mining companies are most often leased from state-owned miner, *Gécamines*. A limited number of companies operate on land owned by the company itself. The approach each company embraces with regards to the presence of artisanal miners on their concessions is dictated by internal policies, customers' expectations, and corporate culture, and differs widely between the companies (Katz-Lavigne 2019; IN-CS-001-02222021; IN-CS-002-03182021). This trend creates a wide-ranging set of rules and expectations, making it difficult to analyze corporate behavior at the regional or national

level. However, while practice varies, the DRC Mining Code clearly states that a concession holder accepting artisanal miners can only do so by providing a written authorization and, more importantly, by ceding the part of the concession dedicated to artisanal mining (DRC Government 2018, 21)

Interviews I conducted with NGO members in the DRC raised a core issue in the difficulty to access cobalt-rich areas (IN-CS-001-02222021; Katz-Lavigne 2020a; IN-SP-002-04222021; IN-UC-002-0302202; BGR 2021, 52). The establishment of industrial mines on areas traditionally occupied by local communities, as well as the displacements that these new operations entailed, impacted negatively the ability of artisanal miners to access the ore (IN-CS-002-03182021). This issue echoes the accessibility concerns around ZEAs and the geographical location of areas reserved for artisanal mining far from population centers allowing for the export of the mineral to processing plants. It should also be noted that artisanal miners also sometimes operate on waste tailings resulting from the industrial operations. Beyond the low grade of the cobalt ore, these locations appear critically dangerous due to their toxicity and instability (Friedman 2019; Nkulu et al. 2018; BGR 2019, 27). This practice also in specific cases increases tensions between ASM and LSM. Tailings are the results of historical mining and in some concessions, the reclamation of tailings' products extracted with less efficient technology proves valuable to industrial miners. The participation of artisanal miners in this process then constitutes a loss of financial gain, and spurs strategies of expulsion of artisanal miners (IN-MC-002-02082021).

While mining companies publicly recognize the risk significance of artisanal operations on their concessions and the need to provide a response to these issues, important steps need to be achieved (IN-UC-001-03012021). Projects such as the Mutoshi Pilot Project provided learning that could inform future on-the-ground programs with close relationships between artisanal and industrial mines, and the mitigation of reputational risks for the battery

supply chain actors (IN-MC-001-02082021). However, the weakness of implementation mechanisms, and more critically, the complexity of arrangements between artisanal miners, security forces (public and private), industrial operators and state regulators (Katz-Lavigne 2020b; IN-CS-001-02222021) create a fluid situation in which readjustment is constant. When this readjustment is not achieved in a mutually acceptable way, violence becomes a viable alternative (ICG 2020; Ross 2019).

The arrangements between artisanal miners and industrial operators can be classified in two broad categories. First, agreements might tie the sale of the artisanal miners' production to the industrial operation through a cooperative for example. This approach directly introduces artisanal materials in the industrial miner's supply chain and is similar to the one adopted by Chemaf<sup>2</sup> in the Mutoshi Pilot Project. Second, concession holders might look away and provide no support for the formalization of the artisanal operators (IN-IO-001-02242021). The latter is the *de facto* situation in most operations in the Congolese Copperbelt. This situation nevertheless allows these miners to sell their production to other buyers than the concession holder (IN-CS-001-02222021).

Concerns around land access rights are common across postcolonial settings and the DRC is no exception (Jurewicz 2013, Verbrugge, Cuvelier and Van Bockstael 2015). The perception of artisanal miners entering concessions is often seen in a very negative light as Katz Lavigne argues when stating that “artisanal miners who enter LSM sites in southeastern DRC are viewed in an ambiguous, often negative light. At times they are described as clandestine, which situates miners vis-à-vis the presumed “legal” property rights of companies” (2019, 1). The application of classical property rights theory in a country such as

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<sup>2</sup> Chemaf SARL was founded in 2001 and is a subsidiary of Shalina Resources Ltd., itself fully owned by Shalina Group Ltd. The latter is organized in two vertical businesses, a healthcare branch (Shalina Healthcare) and a mining branch, of which Chemaf is part of. In the case of the Mutoshi concession (PE 2604), public miner, Gécamines, is leasing the land to Chemaf which established an industrial mine on the site, and a smaller artisanally-mined area, known as the Mutoshi Pilot Project.

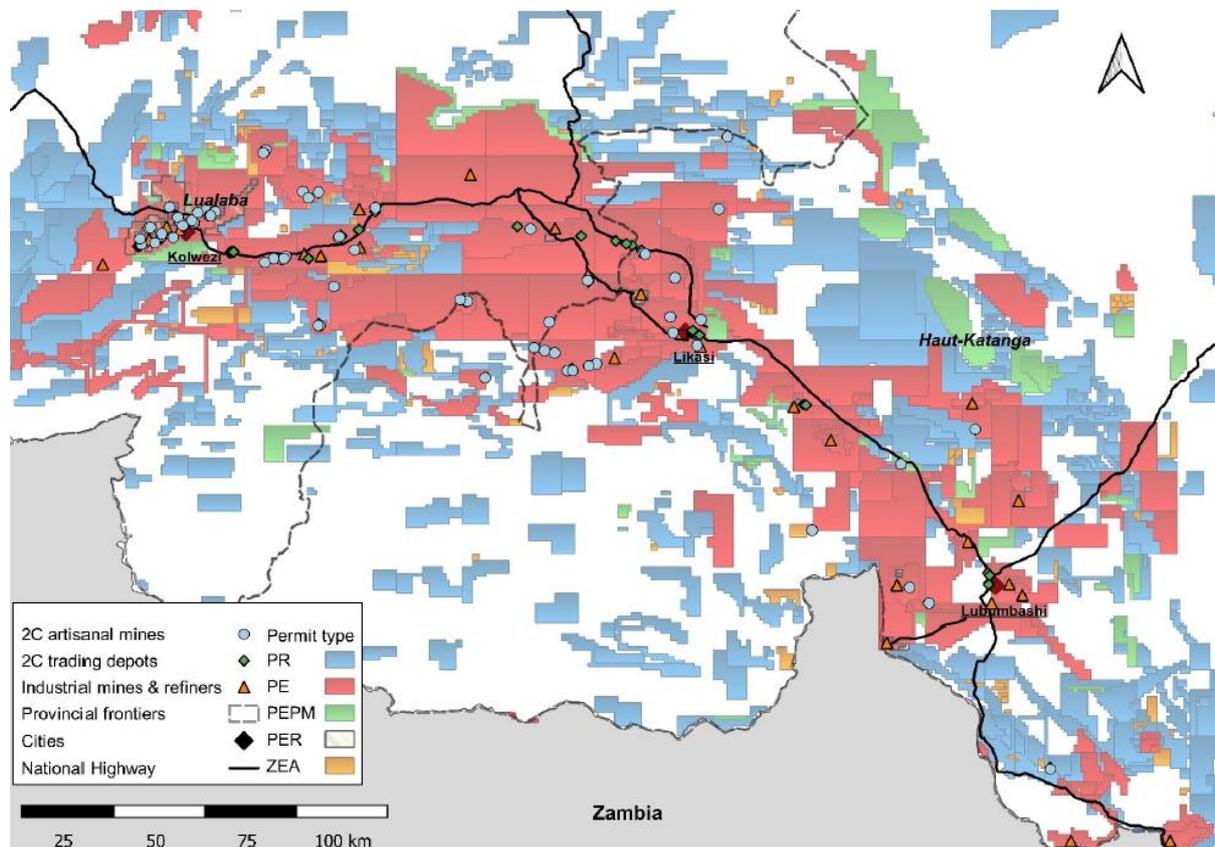
the DRC equates the operation of private sector's actors, conferred land by the central government, as the only productive economic system. As Geenen suggests, in this perspective artisanal mining is seen as economically deficient providing little to no benefits (2015). After decades since the decolonization, the classical property rights theory remains at the center of the DRC's legal approach to land access rights. Rejecting the role of artisanal mining as a core economic activity ensuring the survival of hundreds of thousands, this approach infuses corporate and governmental behavior throughout the African continent (Geenen 2012; Mwitwa et al. 2012; Debrah, Mtegha and Cawood 2018). Additionally, research has been done on the economic spinoffs of cobalt artisanal mining, particularly in periods of high global prices. In 2020, Kabemba and Mukuli proposed an estimate of USD 2 billion of economic revenues generated by the cobalt ASM sector in the Congolese Copperbelt, far from a perception of an ineffectual economic system (33).

Beyond the issues raised by land access rights, the relationship between artisanal miners and security forces needs to be explored more. As miners access industrial concessions, with or without authorization of the concession holders, a process of intense negotiation occurs with the public or private security forces (Katz-Lavigne 2020a; IN-CS-002-03182021). This process of negotiation has been described in-depth by Katz-Lavigne in the DRC case but is also a feature of unformalized artisanal mining globally. Nevertheless, in the cobalt case, the increasing pressure to ensure responsible sourcing, led to the otherness of artisanal miners entering concessions. The reputational risks, raised by the presence of artisanal miners on industrial sites, has been integrated into responsible sourcing standards and constitute a red flag for the industrial mines supplying raw materials to refiners or being audited under existing frameworks (IN-CS-001-02222021; IN-NP-001-02222021; IN-SP-002-04142021). These frameworks include the Responsible Minerals Initiative (RMI) and Responsible Cobalt Initiative (RCI)'s Cobalt Refiner Supply Chain Due Diligence Standard,

the upcoming ASM Cobalt Environmental, Social, and Governance (ESG) Management Framework, as well as mineral agnostic standards such as the RMI's ESG Standard. This approach reinforces an already existing trend of militarization (or para-militarization) of the mine sites that led to significant clashes between security forces and artisanal miners. Additionally, national and international frameworks such as the Congolese Mining Code or the OECD Due Diligence Guidance for Responsible Minerals Trade require the absence of public and private armed groups in mining sites, with the notable exception of the *Police des Mines et des Hydrocarbures* (Mining Police, PMH)

Artisanal miners appear to be drawn to access mine tailings and other concession areas due in part to the relative accessibility of the ore and the location of the sites close to access roads and/or populated areas. As I addressed here, while industrial miners are aware of the significant risk that both inaction and military action hold (IN-UC-001-03012021; IN-UC-003-04122021), the root cause of the issue are often ignored for temporary patches. Here, the concept of cohabitation between ASM and LSM appears to face significant limitations due to the changing nature of the industrial exploration and exploitation. Hilson, Sauerwein and Owen argue that, in the case of the gold industry, the constant fluctuation in global prices, as well as the change in ownership of mining projects, makes it very difficult to adopt a stable strategy of cohabitation with ASM (2020, 18). Among their recommendations is a shift from the concept of cohabitation to “autonomous coexistence”, grounded into legal instruments and a geologically led formalization. This avenue should be researched extensively, but a critical barrier can already be identified in the DRC Copperbelt as most of the viable concessions have already been conferred to private operators (see Map 1 below). Nevertheless, as Kinshasa introduced the new *Entreprise Générale du Cobalt* (EGC), a state-owned monopoly for the buying and selling of artisanal cobalt products, under the umbrella of Gécamines, the organization of the sector will likely evolve (Deberdt 2021a; Deberdt

2021b; IN-UC-002-0302202). If sustainably managed, the new company could prove critical to reorganize the artisanal cobalt sector and ensure the sustainability of ASM production in what Hilson, Sauerwein and Owen describe as “autonomous coexistence” (2020).



Map 1: Cadastral map of the Congolese Copperbelt. Source: BGR 2021, 15. Note the high concentration of concessions in the region, leaving little to no space for new ZEAs.

#### 1.4. On-the-ground responses to artisanal cobalt mining: national and international responsible sourcing.

The increasing interests in cobalt at the national and global stage led to a flurry of initiatives aimed at providing solutions to the responsible cobalt challenge. More than only avenues for sourcing the ore responsibly, these programs also answer to supply security challenges and the need to ensure availability of critical materials for corporate actors. The

growth in electric vehicles (EV) sales is fueling this trend. According to Bloomberg's estimates, two-third of vehicles sales in 2040 will be powered by electricity (McKerracher and Wagner 2021), creating a major incentive for car manufacturers to secure critical battery components. In this part, I show how responsible sourcing programs focus on highly visible risks at the expense of more complex and deep-rooted issues, in particular land access rights. I focus on two international initiatives established by RCS Global Group (Better Mining) and Trafigura<sup>3</sup> and its partners (Mutoshi Pilot Project). As Mutoshi closed in December 2020, I will provide an overview of Trafigura's new partnership with the Congolese government through the Entreprise Générale du Cobalt. These three entities are supported by a vast network of alliances and initiatives, including but not limited to the Fair Cobalt Alliance (FCA), the Global Battery Alliance (GBA)'s Cobalt Action Partnership (CAP), or even the Responsible Minerals Initiative (RMI) and its auditing framework. Importantly, I do not aim at measuring the impact of each program, or even examining their feasibility or replicability to other sites. Such analysis has already been conducted independently (Mancini, Eslava and Matthieux 2021) or commissioned by program implementers (Johansson de Silva, Strauss and Morisho 2019). However, I illustrate how responsible sourcing programs and their implementers need to broaden the scope of their work, to tackle the root causes in the ASM cobalt sector. Through a description of their structure and goals, I intend to demonstrate that land access rights issues are ignored. While corporations develop governance systems to manage risks they consider critical to their reputation, the treatment of the deep causes is often relegated to the authority of the state.

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<sup>3</sup> Trafigura Group Pte Ltd. is a Swiss base metals and energy commodity trader. The company partnered with Shalina Resources (Chemaf's parent company) to develop the Mutoshi Pilot Project. Under the three-year agreement, Trafigura provided financing to establish the responsible sourcing project and bought the cobalt hydroxide production refined at Chemaf's Usoke plant.

### RCS Global Group-implemented Better Mining

Better Mining has been a catalyst of responsible sourcing strategies in the DRC since the implementation of Dodd-Frank Section 1502 and the focus on conflict minerals (tin, tungsten, tantalum, and gold, or 3TG) in the eastern provinces (RCS Global 2009). The program is the result of this long history of engagement under what was then known as the Better Sourcing Program (BSP). The program grew significantly since then and is now implemented at eight cobalt and copper sites in both provinces of Lualaba and Haut Katanga, with a goal to reach twelve sites in the next two years. This growth is in part fueled by the support of the RMI through a strategic partnership in which the multi-industry initiative will “provide strategic support, funding, stakeholder engagement, and advice to RMI members and cobalt refiners on how this work supports their due diligence activities” (RMI 2020).

Better Mining is currently implemented on sites managed by existing cooperatives, including the *Coopérative Minière Kupanga* (COMIKU) at Kasulo; *Coopérative Minière pour le Développement Social* (CMDS) at Kamilombe; *Exploitation Minière Artisanale du Katanga* (EMAK-C) at Karajipopo; *Coopérative Minière de Développement Intègre du Congo* (CMDIC) at Lufungu; and *Société Coopérative Minière le Peuple d’Abord* (SCOMIPA) at Midingi. Kasulo has historically been an important site for Better Mining. The mine site, located in an urban setting, one kilometer north of the city center, has had a complex history of mining. In 2017, the site was formally designed as a ZEA, and the provincial government conferred the off-take right to Chinese-owned company, Congo Dongfeng International Mining (CDM), subsidiary of Huayou Cobalt.<sup>4</sup> A second important site for Better Mining, Kamilombe, faced a reconfiguration of its organizational system.

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<sup>4</sup> According to some respondents, CDM holds an exclusive agreement in Kasulo while at other sites no legal purchasing agreements are in place (IN-IO-001-02242021).

While the ore was originally exclusively bought by CDM on land leased by Glencore's subsidiary Kamoto Copper Company (KCC), the cooperative on the site refused the renewal of the contract with the Chinese company (IN-SP-002-04222021). This case highlights the fluidity and ever-changing business conditions of a particularly sensitive resource, and the complexity to establish long-term programs.

Better Mining functions very differently and at a lower cost than other responsible sourcing strategies implemented in the region. The program does not provide direct site enhancement or support but is a monitoring mechanism with on-the-ground, permanent, and in-person information gathering. Hence incidents are recorded and translated in risk categories. Each recorded breach of policies or best practices (i.e. incidents) is transmitted to the site operator, the cooperative and/or the mining authorities. As a collaborative process, corrective action plans (CAPs) are then defined to remediate to the identified risk category and discussed monthly with stakeholders involved. This process ends with the closure of the CAPs and the communication of this closure to national and international parties involved (IN-SP-002-04222021; Carter and Sturmes 2020; RCS Global 2019; Calvão, Macdonald and Bolay 2021; Mancini, Eslava and Matthieux 2021).

RCS Global Group-implemented Better Mining uses monitoring and the perception of incident transparency as a driver of change at the mine site level. The low cost of the program resides in the transfer of the responsibility to develop the needed improvement to the different actors present on site (operator, cooperative, governmental agency). Building on a standard developed by the company, the Better Sourcing Program Standard v6 (2016), and aligned with the OECD Guidance (Mancini et al. 2020, 60), Better Mining intends to bring artisanal mine sites in alignment with international best practices. Nevertheless, the fluidity of today's cobalt market and the ever-changing condition at mine sites makes it challenging to support a long-term approach. A critical example of this trend is the case of Kasulo, now coveted by

EGC and its partners, Trafigura and Pact (Morisho and Lenfant 2021), leading to a hold on sourcing at the site.<sup>5</sup>

Addressing now the core of this paper, while Better Mining performs a supply chain evaluation (SCE) report at each site, the program does not include a land access rights component. The SCE provides baseline information on the ownership titles of sites where Better Mining operations, however, as a responsible sourcing program, I argue that a significant limitation of the program is the absence of specific land access rights remediation measures. In particular, the issues raised at Kamilombe and Kasulo. More specifically, watchdog non-profit Southern Africa Resource Watch (SARWATCH) reported concerns regarding the sites operated by CDM. In Kamilombe, it seems that the company was imposed by the provincial government, forcing the miners to sell only to the Chinese operator (this situation changed following the cooperative's refusal to extend the contract). Additionally, the inability for artisanal miners to access economically viable ZEAs pushed them to extract unlike ore located at a depth of 80 to 90 meters, contravenes mining regulations allowing a maximum depth of 30 meters (Kabemba and Mukuli 2020, 24).

#### Transnational collaboration: the Mutoshi Pilot Project

Northeast of Kolwezi is located a cobalt-rich concession, owned by state-owned miner Gécamines, and leased to a private operator, Chemaf.<sup>6</sup> The Mutoshi mine site encompasses an industrial concession on which artisanal miners were allowed to develop a responsible sourcing pilot project since 2018. The project was funded by Swiss trader, Trafigura, one of

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<sup>5</sup> Direct discussion with stakeholders involved in Kasulo, August 2021.

<sup>6</sup> Chemaf is a subsidiary of Dubai-based Shalina, a pharmaceutical company that in the early 2000s saw the potential to invest in the cobalt and copper mining industry in the DRC after the fall of the *Gécamines* (IN-SP-004-05062021).

the largest raw commodities trading companies, and implemented by US nonprofit, Pact. The project itself was assured by Kumi Consulting, a British service provider and sustainability consultancy, and artisanal miners were organized under the umbrella of the *Cooperative Minière Artisanale de Kolwezi* (COMIAKOL). This transnational organization, and the number of different actors is particularly interesting and might have played a role in the closure of the project (IN-MC-001-02082021; IN-NP-001-02222021).<sup>7</sup> In March 2020, the COVID-19 pandemic put a hold on the operations and in December of the same year decision was taken to definitively close the Mutoshi artisanal pilot project and establish an industrial mine (IN-MC-001-02082021; IN-NP-001-02222021).

Mutoshi established a very different strategy than Better Mining, more costly but also with a direct involvement of the responsible sourcing implementers in the extraction of ore and the everyday management of the site. Benchmarked against Trafigura's Responsible Sourcing Artisanal and Small-Scale Mining (ASM) Expectations as well as OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (hereafter OECD Due Diligence Guidance) (Johansson de Silva, Strauss and Morisho 2019, 12), the project was intended as a capacity building and commercial venture with the objective to reduce reputational risk for the buyer, enhance cooperation between a group of actors, and prove the potential for collaboration between ASM and LSM. In particular, the operator, Chemaf, ensured the removing of the topsoil to allow artisanal miners to mine in safer conditions and in mining pits respecting the 30 meters limit established in the 2018 Mining Code. Additionally, personal protective equipment (PPE) was distributed, a health clinic established, and cards provided to the miners allowed on site. Finally, a price control system also provided more income stability to the miners.

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<sup>7</sup> Chemaf intended a lawsuit against Trafigura regarding the slow financing of a cobalt processing plant promised by the Swiss trader. See Africa Intelligence 2020.

Nevertheless, while this project highlighted one avenue of cooperation between artisanal miners and midstream buyers, the end of the project and the expulsion of miners from the industrial concession, questions the motives behind the responsible sourcing strategy. During the interviews I conducted, civil society stakeholders clearly identified severe limitations to the Mutoshi Pilot Project long term benefits. One respondent stated that “we know the end of this project. It was not benefiting to artisanal miners” (IN-CS-002-03182021). Aligned with the goal of this article the Mutoshi Pilot Project does not include a land access rights component. Even more significant, the legal structure of the project did not follow the requirements of the Congolese Mining Code. SARWATCH found that Mutoshi was established without a ZEA and in breach with article 30e (Kabemba and Mukuli 2020, 21). This issue was brought up by interviewees on several occasions during the research (IN-IO-004-05122021; IN-CS-003-05182021).

#### National response to sourcing risks: the Entreprise Générale du Cobalt

The Entreprise Générale du Cobalt (EGC) is the result of the DRC’s government strategy to tackle supply risks in the artisanal cobalt sector, but also to centralize and secure tax revenues from an industry operating in opaque circumstances. The company is owned at 95 percent by the state-owned miner, Gécamines, with the 5 remaining percent directly owned by the government (IN-UC-002-03022021). The establishment of EGC followed the listing of cobalt as strategic mineral, alongside lithium, germanium and coltan, by decree in 2018 (DRC Government 2018). Subsequent decrees created the legal and political landscape of artisanal cobalt mining under EGC, including the *Autorité de Régulation et du Contrôle des Marchés des Substances Minérales Stratégiques* (ARECOMS) (DRC Government 2019a; DRC Government 2019b).

Trafigura Group, then involved in the Mutoshi Pilot Project, quickly sized the opportunity and signed a non-exclusive trading agreement with the newly established EGC (Trafigura 2020). In the current form of their engagement, Trafigura and Pact (the non-profit also involved in Mutoshi) joined the Technical Committee of EGC alongside senior members of the company. As such, they provided support for the definition of the EGC Responsible Sourcing Standard (EGC 2021), and financially back the formalization of artisanal sites aimed at becoming EGC's suppliers.<sup>8</sup> For example, in July 2021, the Technical Committee released a baseline study on the Kasulo site (Morisho and Lenfant 2021), widely considered one of the only artisanal sites currently able to support a responsible sourcing component (IN-SP-002-04142021).<sup>9</sup>

EGC is not a one-off experiment. It is inscribed in a long history of political will to establish a monopoly over cobalt and copper (2C) artisanal production in the country. The Nouvelle Company (NOUCO), as well as *Exploitants Miniers Artisanaux du Katanga* (EMAK-C) in the early 2000s tried unsuccessfully to centralize the buying and selling of 2C artisanal products. However, EGC's focus on responsible sourcing brings a new dimension previously ignored by the provincial and national governments. The EGC Standard implements strict requirements on all actors involved in the cobalt supply chain, from miners, to cooperatives, traders, and finally EGC itself. As such, the company's potential to reshape a market representing around 10 percent of the world's cobalt could be transformative. This situation raises expectations for the company from supply chain actors and civil society (IN-MC-001-02012021; IN-MC-002-02082021; IN-UC-002-03022021; IN-CS-002-03182021; Deberdt 2021a). For example, the Lubumbashi-based non-profit *Espoir Pour Tous au Congo*

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<sup>8</sup> Trafigura will fund ASM formalization, traceability, due diligence conducted by all responsible actors in the supply chain, checks and controls, ongoing monitoring and risk mitigations, audits, and multi-stakeholder engagement (IN-NP-001-02222021).

<sup>9</sup> The Kasulo site, as discussed above, is currently operating under a buying agreement from CDM, and with monitoring from RCS Global Group's Better Mining. During the study conducted by the Technical Committee, researchers were refused access to the site, highlighting the tensions on the ground.

(Hope for All in Congo) actively supports EGC on social media, insisting on the need to create a monopoly on the sector (CASMI 2021). Nevertheless, as I conducted interviews with supply chain actors and other stakeholders, the informational gap quickly appeared (IN-SP-003-04222021; IN-SP-002-04142021; IN-IO-003-05032021).<sup>10</sup> From critiques of the lack of transparency in EGC and Trafigura's contract (Tsieleka 2021), to a general absence of knowledge about the newly established company, the DRC Government and its partners will need to establish trusted communication to adequately tackle this limitation (Deberdt 2021b).

A recurrent concern raised by downstream companies and service providers is the application of a monopoly to the artisanal cobalt sector (IN-DC-001-04082021; IN-SP-002-04142021). While these concerns appear to be more based on philosophical differences between a market-based system and a system in which a government established a monopoly on a raw commodity, it remains important to clarify that EGC is free to sign agreements with any other companies interested in buying and trading the artisanal production (IN-MC-002-02082021). Nevertheless, the close links that the company enjoys with its Swiss partner, and the limited financial backing of the company by the Congolese state raises questions. In a 2021 report, the German geological survey, *Bundesanstalt für Geowissenschaften und Rohstoffe* (BGR), addressed these topics and argued that “the state-owned company EGC [...] does not currently have the financial means and the technically necessary processing capacities to purchase the entire cobalt production and to ensure responsible artisanal mining on a broad scale” (2021, 53). The governmental body added that only a diversification of the partnerships with other crude refiners in the DRC could allow the company to bring processing capacities and financial capital. The report states that only additional partnerships

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<sup>10</sup> Interviews were conducted between February and May 2021. It appears that even after the 2021 OECD Forum on Responsible Mineral Supply Chains during which EGC, with support from Trafigura and Kumi Consulting, organized a panel increasing the information available to stakeholders, a need for more information remained. The author argues that local and global engagement is still needed to ensure that all actors are aware of EGC's role, requirements, and organization.

with established crude refiners already operating in the country would allow the company to bring in processing abilities and capital. Interviews conducted with stakeholders identified similar concerns (IN-IO-003-05032021; IN-R-002-04192021; IN-UC-003-04122021).

### 1.5. The disconnect of responsible sourcing and land access rights – discussion

The question brought by this research is to address the gap between responsible sourcing and land access rights. As a core issue to the sustainability agenda, land access rights are critical to ensure that artisanal miners operate in areas dedicated to them and economically viable. This article does not delve into discussions of formalization, but intends to bring to the fore of responsible sourcing strategies the issue of access to land. To avoid what Van Bockstael coined a “land grab ‘from below’” (2019), actors in the responsible sourcing field would benefit from integrating land access rights issues in their broader agenda. Embracing the negotiated nature of artisanal mining (*ibid.*, 1) when it comes to accessing the land (both with industrial miners, but also with other landowners) is a critical step to ensure that conflicts between ASM and LSM dissipate in the DRC’s Copperbelt. As Spiegel argues in the context of Cambodia, the prioritization of LSM in access to land and land access rights created a profound imbalance and is a driver for conflict (2016).

As CSR strategies, responsible sourcing programs have historically focused on visible and emotionally heavy risks. Child labor, occupational health and safety, and to a lesser extend environmental pollution constitute the core of the response of global brands to salient risks in their supply chains. However, many of these can be mitigated by an appropriate land distribution, reflecting both economic and geological realities. As I described in the Better Mining case the geological characteristics of the terrain do not even allow to align with legal requirements of the depth of the artisanal pits. A similar situation arose in Mutoshi were

Chemaf, the concession holder, retained control of the concession area allocated to artisanal miners, in contravention to article 30e of the Mining Code. However, while these concerns reflect legal limitations, they hold significant impacts on miners' livelihoods.

The case of the closure of the Mutoshi Pilot Project is particularly interesting. As the project closed in December 2020, due to a combination of factors, including the COVID-19 pandemic and increasing tensions between the partners, Chemaf decided to establish an industrial mine site. This transition effectively closed the doors of the site to the 5,000 registered miners (Johansson de Silva, Strauss and Morisho 2019, 12), without any compensation or relocation plans. This situation brings to light the processes through which coexistence of artisanal miners and industrial operations spurs conflicts. It also questions the sustainability and long-term perspective adopted by responsible sourcing projects that do not secure land for ASM miners. This trend, characterized by a focus on emotional, visible incidents, and building on reputational risk management, excludes deep rooted causes such as land access rights.

As Hilson, Sauerwein and Owen argue for an autonomous coexistence between artisanal and industrial mining, I support that this approach would require a complete redefinition of concessions in the Congolese Copperbelt, a case unlikely to occur. In parallel, as responsible sourcing programs step up to tackle risks in the cobalt supply chain, the inclusion of land access rights is critical. As EGC, a state-owned monopoly, is being established, this issue should receive particular attention, and has been included in the EGC Standard and its requirements toward mining cooperatives. However, requirement 2.2.1. falls short from recognizing the immense challenge of establishing a viable ZEA in the region and does not align with article 30e of the Mining Code.

“Mining cooperatives shall be registered and either operate within an artisanal mining area (ZEA) instituted by ministerial order and assigned to the cooperative, or in a designated area within a private concession that has been assigned for this purpose by the concession title holder. Where the mine site is within the perimeter of a private concession, the cooperative shall provide evidence of the existence of a written authorisation from the concession title holder.” (EGC 2021, 6)

As I discussed before, article 30e of the Mining Code requires that the area of an industrial concession used for artisanal mining be ceded to the cooperative in charge. Hence, the requirement of the EGC Standard falls short of securing land access for artisanal miners depending on industrial concession holder’s decisions.

This situation raises important questions, including the legality of EGC’s sourcing. How will EGC engage with the issue of artisanal miners extracting ore on industrial concessions? As the only legal buyer of artisanal materials, the theory would mean that no other entities (even concessions owners and holders) could absorb artisanal production directly into their feeds. But at the same time, how can EGC buy minerals extracted illegally on a third-party concession? The answer to these questions is logical. EGC cannot buy illegally produced materials. However, considering the criticality of artisanal operations on industrial concessions, the EGC must develop a strategy to bring these miners into legal channels. As this article is meant to highlight avenues for more research, I believe it is important to consider changes to the Mining Code to facilitate the participation of artisanal miners and avoid their exclusion based on land access rights concerns. In particular, the strict exclusion of ASM operations on an existing LSM concession, as defined in article 30, should be reconsidered as to providing artisanal miners with viable lands in a highly commodified region. Additionally, responsible sourcing program should embrace concerns of land access rights if they aim at building sustainable mechanism. Two cases can be identified here, LSM

companies operating on land leased to Gécamines and LSM companies operating on land owned by the company itself.

As a subsidiary of state-owned Gécamines, EGC is in a favorable place to renegotiate access to land on behalf of artisanal miners and ensure the off take of the artisanal production as per its mandate. While recognizing the complex nature of negotiations in such a sensitive industry, potential avenues could include a price guarantee provided by EGC to the artisanal operators and that contractually cannot be matched with the concession holder. Similarly, changes to article 30e of the Mining Code could allow for the superposition of ZEAs and PEs. Because of this article, the superposition is technically impossible due to the requirement that the operator cedes the land on which ASM operations are established.

In this case, and recognizing the limitations of Hilson, Sauerwein and Owen's proposal for autonomous coexistence in the Congolese Copperbelt, there needs to be developed a hybrid system of 'autonomous cohabitation'. By autonomous cohabitation, I argue that land could be shared under specific legal terms allowing ASM and LSM operations on existing industrial concession. Additionally, the production would be sold to the monopoly established by EGC. The new system builds on the central role the state should play in the distribution of land in mineral-rich areas, a topic on which the state often recused itself since the 1990s. In this sense, I recognize the difficulties to implement such a change in a region with a historical weakness of the central government. However, I believe that land access is the core conflictual issue that, if addressed, would trickle down to the eradication of ASM/LSM conflict and a significant betterment of miners' livelihoods. This in turn will decrease other visible risks, including the economic necessity for children to be involved in the industry, the increased investment in OHS, and improvements in environmental management. While not an end in itself, securing land access will provide increase economic benefits to ASM miners as they extract minerals on more viable concessions, with less

complex exportation system (closer to main roads or population centers)<sup>11</sup>. This proposal would necessitate limited changes to the Mining Code, while securing land access for artisanal miners under an agreement between EGC (and by extension the Congolese state) and private industrial operators. The unlikeliness of a reconfiguration of concessions in the highly competitive and sought-after Congolese Copperbelt means that the DRC government would face significant opposition from powerful actors to create new and viable ZEAs. Additionally, as Lukanda argues, most contracts do not include a renegotiation clause (2014), making it complicated and costly to change concessionary rights. Hence, only a negotiated long-term solution could secure access to land for artisanal miners. However, recognizing Hilson, Sauerwein and Owen’s contribution regarding the instability of ownership of mining operations, these negotiated solutions must be transferable and include a stabilization clause (Oshinebo 2010; Majeed 2020) to the benefit of artisanal miners. Additionally, EGG’s Standard should better reflect the DRC legal system to ensure that responsible sourcing is achieved in line with the law.

## 1.6. Conclusion

Following Fraser’s argument that “it is possible to deliver more sustainable outcomes than those offered by traditional engagement and corporate social responsibility strategies if mining companies seek to resolve problems shared by both company and community” (2019, 1), I argue that land access rights is the core issue in conflicts linked to mining in the DRC’s Copperbelt. Nathan Andrews, in the Ghanaian case, rightfully argues for a “denaturalization

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<sup>11</sup> This assertion will need to be explored in subsequent research. While land access will not solve all issues related to artisanal mining in the region, the securing of land access in geologically and economically viable concessions will certainly provide miners with increased income to be, at least partially, spent on better tools, personal protective equipment (PPE), etc. The impacts could also be felt in children’s presence on sites as the economic gain of an adult might be sufficient to support a family. However, this does not negate the need for more training, formalization, and support to the industry by the government and private actors.

or re-politicization of accumulation by dispossession, so that the status quo can be duly questioned and disrupted by movements of local mining dwellers” (2018, 248). In this article I bring a critical approach of the development of responsible sourcing programs inscribed in existing dynamics that have shaped the Congolese mining industry for decades now. I argue that with the increased attention on responsible sourcing of cobalt, actors across the supply chains should address land access rights issues to effectively tackle reputational risks. Importantly, this process should not be a private endeavor, but a collaborative effort between the industry, civil society, and the government. The artisanal sector’s competition with industrial actors to access land, in a context in which virtually all viable concessions have been awarded, prevents the establishment of sustainable responsible sourcing programs.

Building on Hilson, Sauerwein and Owen’s concept of autonomous coexistence, I introduce the possibility to define autonomous cohabitation as an avenue for ensuring that artisanal miners access economically and geologically viable areas on industrial concessions, while securing this access. I argue that companies involved in responsible sourcing programs should aim to develop autonomous cohabitation between ASM and LSM, in which long-term agreements, secured by the DRC state and its newly established monopoly, EGC, ensure sustainable interactions between the two groups. By taking the example of two responsible sourcing programs, the Mutoshi Pilot Project and Better Mining, I support that the current interest in visible and emotional risks hinders the capacity of these programs to successfully tackle core risks, including land access rights.

As the DRC is establishing EGC to answer to both risks in the artisanal cobalt sector and to secure tax revenues from the industry, the moment is critical to fully embrace the deep-rooted issues of these material risks. While child labor and other OHS-related risks are on the front page of news outlets (Sanderson 2019; CBS News 2018; McKie 2021) and spurred lawsuits (Doe 1 v. Apple Inc. 2019), these often reflect deeper trends, of which land

access rights are a part of. As companies invest millions to develop CSR campaigns, distributing PPE, reporting incidents, and uncovering topsoil to facilitate access to the ore, it is important to reflect on the actual long-term benefits of these actions when the land on which they occur can be reappropriated as quickly as it was conferred.

This article provides an overview of the issue of land access rights in responsible sourcing programs of cobalt and supports the need for more research on the topic. In particular, the means through which autonomous cohabitation could be achieved will prove complex and challenging, but research could provide avenues through which mitigating negative consequences. Additionally, conducted online, this study would benefit from an on-the-ground in-depth assessment to understand artisanal miners' potential concerns about an autonomous cohabitation. As CSR strategies in the cobalt sphere are steadily increasing, I argue that more than just individual projects for the resolution of risks driven by emotional responses, the industry, governments, and researchers needs to address the root causes of these risks. Finally, as this article provides a slightly theoretical approach to the issue of ASM and land access in a highly commodified region, I believe additional research is to be conducted with all actors to define a practical implementation of autonomous cohabitation and address concerns of LSM companies, government officials, and ASM operators. The flurry of responsible sourcing programs, through on-the-ground projects, technology-enabled systems, or standard setting requirements will only go as far as root causes allow them. Land access rights is one of them, and in the Congolese Copperbelt, it is a driver of the conflict CSR strategies intend to tackle.

## Annex I – Interviews

Interviews	
<b>Legend</b>	
Interview_respondent category_respondent number in category_interview date	
<b>Respondents' Categories</b>	
CS	Civil Society
DC	Downstream Company
IO	International Organization
MC	Midstream Company
NP	Non-Profit
R	Researcher
SP	Service Provider
UC	Upstream Company
<b>Interview List</b>	
Interview 1	IN-MC-001-02012021
Interview 2	IN-MC-002-02082021
Interview 3	IN-SP-001-02172021
Interview 4	IN-CS-001-02222021
Interview 5	IN-NP-001-02222021
Interview 6	IN-IO-001-02242021
Interview 7	IN-UC-001-03012021
Interview 8	IN-UC-002-03022021
Interview 9	IN-IO-002-03152021
Interview 10	IN-CS-002-03182021
Interview 11	IN-DC-001-04082021
Interview 12	IN-R-001-04092021
Interview 13	IN-UC-003-04122021
Interview 14	IN-SP-002-04142021
Interview 15	IN-R-002-04192021
Interview 16	IN-SP-003-04222021
Interview 17	IN-IO-003-05032021
Interview 18	IN-SP-004-05062021
Interview 19	IN-IO-004-05122021
Interview 20	IN-R-003-05172021
Interview 21	IN-CS-003-05182021

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