



Islands of responsibility?

Corporate sourcing of artisanal cobalt in the Democratic Republic of Congo

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Partner organisation

Africa Resources Watch (Afrewatch) is an NGO based in Lubumbashi, Democratic Republic of Congo (DRC), which focuses on key issues in the mining sector: (1) human rights and community, environmental, women's and children's rights; (2) governance, legal framework and transparency; and (3) advocacy on these issues.

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Cobalt is an essential element within supply chains driving the technological transition to electric vehicles. A majority of the world’s estimated cobalt reserves are in the Democratic Republic of Congo, with 10-30% of Congo’s annual production mined artisanally. Much maligned environmental, social and human rights abuses within the artisanal sector are driving corporate efforts to “clean up” and “de-risk” supply chains. It is imperative that these efforts align with the sustainable development priorities and needs of artisanal mining communities themselves. This issue paper gathers local perspectives on the priority changes needed to improve governance and investment in the sector.

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Summary

The context

Demand for cobalt, a key ingredient in electric vehicle batteries, is projected to soar as consumers and regulators increasingly turn to more supposedly “environmentally friendly” options. Plans announced by governments to phase out the sale of combustion engine cars over the next decade look likely to cement the shift.

The world’s premier cobalt deposits are found in the Democratic Republic of Congo (DRC) where artisanal mining accounts for 10-30% of annual production and generates income for an estimated 150,000-200,000 workers in Lualaba and Haut-Katanga provinces.

However, allegations of human rights abuses have long cast a shadow over the sector. Faced with mounting reputational and legal risks, many multinational companies involved in the mining, refining, trading and use of cobalt claim to have “de-risked” by eliminating “illegal” (i.e. informal) artisanally mined cobalt from the DRC in their supply chains.

Other multinationals have initiated nascent responsible ASM cobalt sourcing programmes that aim to mitigate supply chain risks by “formalising” artisanal cobalt production. These corporate-driven sourcing programmes, along with the DRC government’s creation of a new parastatal – the *Entreprise Générale du Cobalt (EGC)* – in charge of purchasing artisanal cobalt production, will have a dramatic impact on local miners. Despite the proliferation of these initiatives over the years, artisanal miners expressed frustration that (1) local actors are not sufficiently represented in international supply chain initiatives and (2) local concerns have, thus far, not been adequately considered in the design of these initiatives.

Our research

In this context Afrewatch and IIED identified two priority needs for action research:

The first was to inform a conversation about how the sector is currently governed, how change occurs, and the key obstacles and blocks to effective change in the sector – to help international and national actors engaged in discussions on how to effectively bring about positive change in the sector.

The second need was to better document artisanal miners’ priorities and incentives, to promote these views within policy decisions and to understand how these align with the design and underlying motivations of the various corporate and government-led initiatives.

The major issues – licensing, price and power

Interview respondents questioned the rationale for these new responsible cobalt sourcing initiatives, particularly their focus on working with cooperatives in ASM mine sites that have already achieved a level of formalisation. If responsible sourcing initiatives limit their geographic scope to a small number of existing high performing ASM mine sites, they risk creating “islands of responsibility” – artisanal cobalt mine sites that perform well on social, labour and environmental indicators, whilst potentially fuelling a burgeoning black market of miners who are unable to meet these higher standards – and failing to catalyse structural improvements to the entire ASM cobalt operating environment and thus achieve impact at scale.

Today, the majority of artisanal miners, including large numbers of female miners, operate on so called “tolerance zones” – where unlicensed artisanal mining takes place inside permit areas held by large-scale mining companies. Scalable improvements in the artisanal cobalt sector are not possible without an equitable allocation of viable special artisanal mining zones (*zones d’exploitation minière artisanale, ZEAs*) to allow existing artisanal miners, as well as those looking to join the sector (including women, who are largely excluded at the moment, and young working age people), to access cobalt reserves. But there exist significant roadblocks to establishing viable ZEAs: i) a licensing system that privileges large-scale miners, leaving little space for ZEAs and that allows the DRC Ministry of Mines to revoke ZEAs with 60 days’ notice and transfer the permit area to large-scale miners; and ii) the political and economic interests benefiting from informal taxes and fees collected in tolerance zones.

The price paid for cobalt (and associated copper) is the main determinant of artisanal miners’ incomes and livelihoods. Thus, fair prices and fair processes for agreeing on price are critical issues for artisanal miners. Artisanal miners interviewed for this paper,

backed by findings in academic literature, described regular exploitation by trading companies, local and mining police, national secret service, artisanal mine “bosses”, industrial mining companies and local traders. Miners are pressured to pay “unofficial taxes” to these actors but are underpaid for their product. Additionally, assessments of the purity and weight of artisanal cobalt production by traders are regularly subject to fraud. Miners who produce both copper and cobalt are only paid for one mineral – the trader taking the other as “tax”.

The creation of the EGC, with a monopsony on purchasing, and of the Authority for the Regulation and Control of Strategic Mineral Substances Markets (ARECOMS), to improve regulation of the artisanal cobalt production, have the potential to address the issues of predatory and unfair pricing. EGC has stated its intent to tackle issues identified by artisanal miners, such as purchasing both copper and cobalt and introducing a fair price that promotes local livelihoods. Many artisanal miners and Congolese civil society organisations we spoke to laud the EGC’s statement of intent but expressed disappointment that it had failed to release details on the mechanics of fair pricing or published its sales agreements, which will likely significantly impact pricing.

Our analysis

We explore the ways in which corporate denial, disengagement, and sourcing standards that are not inclusive of local interests are unlikely to resolve the myriad of issues facing the artisanal cobalt sector. Our research finds that greater recognition and honest reflection of the realities facing the sector and its supply chains is needed by multinational companies. Greater engagement with artisanal miners and local communities, in particular women who are culturally excluded from mining itself, is needed to identify locally grounded priorities for action.

What we argue for is structural change, along with cultural shifts in private and public sector policy making, that recognise artisanal miners as legitimate players in the sector whilst ensuring their livelihoods and rights are supported. To be considered “responsible” multinational companies must listen to local stakeholders and promote “pro artisanal miner” sectoral reforms. Key investments are needed *prior* to implementing responsible sourcing initiatives in (i) transparent pricing structures based on shared value and a living income for artisanal miners, (ii) relinquishing licenced areas to artisanal miners, (iii) investment in the creation of genuine artisanal miner-led cooperatives, (iv) upgrading existing mine practices and due diligence processes, and (v) the end to mine site expulsions.

The way forward – putting artisanal miners at the heart of policy reforms

Action is needed that moves beyond the remit of existing supply chain initiatives and tackles the structural challenges and cultural perceptions that will continue to hamper the sector’s progress towards greater responsibility and development for miners and their communities. Open and inclusive discussions on fair remuneration and shared value across the value chain should be considered a priority for supply chain actors.

Throughout this report we make specific policy proposals and arguments based on notions of fairness and equity. The fragmented nature of the cobalt value chain means that disparate actors across stakeholder groups (donors, private sector, government, civil society) and operating at different levels of the sector will need to coalesce around a pro-artisanal miner agenda to usher in the era of responsible artisanal cobalt.

Introduction



Demand for cobalt, a key ingredient in electric vehicle batteries, is projected to soar as consumers and regulators increasingly turn to more supposedly “environmentally friendly” options. Plans announced by governments to phase out the sale of combustion engine cars over the next decade look likely to cement the shift.

The world's premier cobalt deposits are found in the Democratic Republic of Congo (DRC) where artisanal mining accounts for 10-30% of annual production and generates income for an estimated 150,000-200,000 workers in Lualaba and Haut-Katanga provinces.ⁱ The World Bank calculates that for each miner directly involved in artisanal mining worldwide, four to five persons indirectly rely on the sector.¹ This equates to 600,000-1,000,000 livelihoods within the DRC's artisanal and small-scale mining (ASM) cobalt sector.

However, allegations of human rights abuses have long cast a shadow over the sector. Faced with mounting reputational and legal risks, many multinational companies involved in the mining, refining, trading and use of cobalt claim to have “de-risked” by eliminating artisanally mined cobalt from the DRC in their supply chains.^{ii,2} Several multinationals have also initiated nascent “responsible” ASM cobalt sourcing programmes that aim to mitigate supply chain risks by “formalising” artisanal cobalt production. These corporate-driven sourcing programmes, along with the DRC government's creation of a new parastatal – the *Entreprise Générale du Cobalt (EGC)* – in charge of purchasing artisanal cobalt production, will have a dramatic impact on local miners. But the formalisation policy agenda shaping the rules that will govern artisanal miners' livelihoods is taking place in a largely “top down” manner, with little input from miners themselves. And although not unique to the DRC, the Congolese political class and multinational corporations have created a policy environment and political economy that favours the interests of large-scale miners over artisanal miners. This has undermined efforts to set aside mineral resources for artisanal miners, a necessary step to reforming the sector.^{3,4}

Structural change (such as creating a sufficient number of ASM-only mining zones and ensuring a living income for miners) along with cultural shifts in private and public sector policy making, is needed to

recognise artisanal miners as legitimate players in the sector whilst ensuring their livelihoods and rights are supported. Shifts in values, ideologies, relationships and power are needed to tackle the challenges and inequalities in the ASM cobalt system. Governments and powerful companies engaging with local communities and miners need to support local voices to inform effective policy implementation; identify legal and regulatory interventions for the greatest improvement towards sustainable development outcomes; and protect vulnerable actors from entrenched discriminatory practices.

A large amount of research has been published in recent years on the cobalt sector in the DRC, much of which is referenced throughout this paper.^{5 6 7 8 9 10 11} Whilst these reports cover similar topics to this one, many focus on those issues directly related to sustainable sourcing, rather than broader issues in the regulatory and political environment – a rapidly changing environment with recent and ongoing institutional reforms. This report examines the evolving policies governing the ASM cobalt sector in the DRC, regulatory and policy barriers to effective change as well as priority issues for artisanal miners – in particular, access to land/mining licenses, better sector organisation/cooperatives and fairer pricing. Working conditions and discrimination against women miners are discussed along with child labour – a priority for international stakeholders. The text within these sections draws on our research to gather local perspectives, interview data and secondary research where available.

1.1 Research approach and methodology

DRC government reforms and industry driven ASM cobalt sourcing initiatives are rapidly reshaping the jobs and livelihoods of artisanal miners. Whilst significant amounts of research exist, for time-poor policy makers and global private sector players the issues remain complex and at times opaque. This is particularly true for international supply-chain actors, who may not have a physical presence on the ground but wield the power and influence to shape how ASM cobalt comes to market. Many fundamental policy decisions are also being taken with insufficient input from artisanal mining communities.

ⁱThe figure of 150,000-200,000 artisanal cobalt miners is the one most commonly cited by both government sources and media outlets. However, it is not clear where the original figure comes from. A recent study from BGR on what it believed to be half the total number of artisanal cobalt mine sites counted 31,000 artisanal miners. See BGR (2021) “Mining Conditions and Trading Networks in Artisanal Copper-Cobalt Supply Chains in the Democratic Republic of the Congo.” Artisanal miners are highly mobile, often shift mining activities to other mineral sectors based upon pricing, and often-times engage in mining as a seasonal activity to supplement income from agriculture and/or animal husbandry. Thus, it is costly and daunting to collect precise data on the exact number of artisanal miners working in a specific sector at any given moment. The wide range of available figures suggests that many statistics used to describe the sector are unreliable. ASM cobalt production estimates range from 9,000-30,000 tons in recent years.

ⁱⁱInternational Rights Advocates has initiated a class action lawsuit in US courts against major multinationals for their alleged complicity in purchasing cobalt produced using child labour.

Two priority needs for this research were therefore identified:

The first was to inform a conversation about how the sector is currently governed, how change occurs, and the key obstacles and blocks to effective change in the sector – to help international and national actors engaged in discussions on how to effectively bring about positive change in the sector.

The second need was to better document artisanal miners' priorities and incentives, to promote these within policy decisions and to understand how these align with the design and underlying motivations of the various corporate- and government-led initiatives.

The research for this report was undertaken over a 6-month period from October 2020 to March 2021 as a joint partnership between African Resources Watch (Afrewatch) and the International Institute for Environment and Development (IIED).ⁱⁱⁱ

In December 2020, Afrewatch undertook a series of semi-structured interviews to collect views on proposed and existing traceability initiatives and their role in tackling priority challenges for the sector. Afrewatch spoke to 41 individual actors across 23 organisations, including members of the Ministry of Mines and provincial Mines Division, government regulatory and technical agencies, national NGOs, international NGOs with a strong local presence, local and international

mining companies, four artisanal mining cooperatives, and independent male and female miners at the Kamilombe, Kawama and Kapata mines.

In March 2021, Afrewatch hosted a multi-stakeholder meeting in Kolwezi to share the preliminary findings of this research. The 33 participants at this event included Lualaba Provincial Ministries, Provincial Technical Services, Mining Companies, Cooperatives, artisanal miners, NGOs, and representatives from Multinational Projects. Participants engaged in in-depth discussion across three key areas: (1) cooperatives and artisanal mining zones; (2) international traceability initiatives and the EGC; and (3) women and children in artisanal mining.

IIED and Afrewatch undertook a literature review and conducted 14 research interviews with end users of cobalt, international industrial mining companies, commodities traders and refiners, international NGOs, multi-stakeholder initiatives, industry associations and supply chain service providers. In addition, IIED attended regular meetings of the Cobalt Action Partnership (CAP) and international conferences on the artisanal cobalt sector in the DRC.

Following a peer review, this paper was shared with interviewees to verify quotes and analysis drawn from interviews.

ⁱⁱⁱ IIED is a member of the Global Battery Alliance's "Cobalt Action Partnership" – one of the nascent ASM cobalt sourcing initiatives.

An evolving policy environment

2

The Congolese state currently exerts “waxing and waning state control” over the mineral sector, posing challenges for both large-scale and artisanal miners.¹² Poor design and implementation of the mineral governance framework^{iv} creates what one academic has referred to as a “formidable environment” for both artisanal and large-scale miners, with recurring instability, exploitation and the dispossession of assets and rights.¹² Informal artisanal mining is both “authorised” and “unauthorised”, which further complicates an already complex and dynamic sector.¹³

The DRC's mining sector has seen significant policy reforms in recent years, including in response to child labour concerns and the challenges faced by artisanal miners. Key reforms include a 2018 revision of the 2002 Mining Code, which introduced higher taxes on strategic minerals, including cobalt, and a community development royalty of 0.3%.^v The revised law also made it necessary for artisanal miners to be members of a cooperative in order to legally mine in specially designated Artisanal Exploitation Zones (*zones d'exploitation minière artisanale*, ZEAs).^{vi} Complex national and provincial-level dynamics and politics, which resulted in the formation of a coalition government from January 2019 to January 2021 and multiple reports of tensions between Kinshasa and provincial governors particularly in the mineral rich areas Haut-Katanga and Lualaba, have since hampered the robust implementation of some of these changes.^{vii} So too has the Covid-19 pandemic which affected cobalt production, trade and exports in 2020.¹⁴

Following an Amnesty International and Afreewatch investigation in 2016, the DRC introduced a number of changes to tackle child labour. This has included: a national strategy to combat child labour, and a related implementation plan;^{15 16} the relocation of the cobalt trading centres from downtown Kolwezi to Musompo, 20 kilometres away; the closure of several trading houses in residential neighbourhoods (to address the fact that mining sites located near residential areas are more likely to draw children into the sector); evictions of some buying houses and artisanal miners by the army; and greater sensitisation of cooperatives that claim to

no longer tolerate the presence of children in artisanal mines.^{viii 17 18}

For artisanal mining of “strategic minerals”, the Congolese government has created two new institutions aimed at better regulating the sector – the Authority for the Regulation and Control of Strategic Mineral Substances Markets (*Autorité de régulation et de contrôle des marchés de substances minérales stratégiques*, ARECOMS) and the EGC. Although the decrees creating these new institutions were passed in November 2019, at the time of publication, details on their operating models continue to emerge.

2.1 Understanding the *Entreprise Générale du Cobalt*

The EGC is a newly created subsidiary of *la Générale des Carrières et des Mines* (Gécamines) – the DRC's state-owned mining company involved in industrial exploration, research, and production of mineral deposits including copper and cobalt.^{19 20}

According to EGC Director General, Jean-Dominique Takis Kumbo,²¹ the EGC's objectives are to combat fraud and corruption in the sector, improve the business climate for artisanal cobalt, and ensure all artisanal cobalt production complies with its Responsible Sourcing Standard – a set of operational requirements launched in March 2021 for artisanal cobalt mining.²²

The EGC has been granted a monopsony on the purchasing, processing and marketing of artisanal cobalt in the DRC for five years, renewable indefinitely.^{ix 23} Company representatives and press reports²⁴ have stated that the company plans on using its monopsony power to limit the quantities of ASM cobalt supplied to the market to increase prices. EGC will reportedly create a fund, financed by 3-5% of its cobalt sales, to stabilise the incomes of artisanal miners, which are sensitive to international cobalt price swings.²⁵

^{iv} For example: Congo's government agencies specialised in the artisanal mining sector, including SAEMAPE (*Service d'Assistance et d'Encadrement de l'Exploitation Minière Artisanale et à Petite Echelle*) and the newly-founded ARECOMS are supposed to regulate mine-site safety. Neither have the financial or technical capacity to accomplish their missions. SAEMAPE agents reported they regularly allow tunnel depths to exceed the legal limit, succumbing to the pressure of artisanal miners who've invested time and money in digging. For more discussion on the challenges of implementing the 2018 mining code provisions on ASM, see for example Umpula-Nkumba (2020).

^v The DRC Mining Code Minier RDC 2018 can be found here on the EITI's website <https://eiti.org/document/mining-code-of-democratic-republic-of-congo> and a media analysis of some of the key changes and events surrounding revision of the law can be read here: Mining Review Africa (1 September 2020) 'Unpacking the revised and annotated DRC Mining Code' <https://www.miningreview.com/gold/unpacking-the-revised-and-annotated-drc-mining-code/>

^{vi} Article 109 of the Mining Code revised in March 2018 and article 1.21 : “artisanal mining: any activity by which an artisanal miner, in an artisanal mining area, engages in the extraction and concentration of minerals using non-industrial tools, methods and processes in accordance with the provisions of this Code.”

^{vii} Cuvelier (2020:5-6) on ‘Power Play in the Lualaba Province’ and International Crisis Group (2020) research on these political dynamics.

^{viii} Between June and July 2019, the Congolese Government called in the army to evict artisanal diggers and close cobalt buying offices (*comptoirs*) located throughout the city of Kolwezi. Though these actions were criticised by multiple Congolese CSOs, including Afreewatch, it was effective in reducing the number of buying offices in the area.

^{ix} According to Albert Yuma Mulimbi, President of the Gécamines board of directors, EGC is held 95% by Gécamines and 5% by the government of DRC (recorded speech during EGC virtual launch, March 31 2021).

Media reports also indicate that the EGC plans on using its monopsony to limit artisanal mining to approved sites (ZEAs) that will be monitored for compliance to the EGC's new Standard. The EGC is proposing to source from a total of seven mine sites and has so far formally identified one, the Kasulo mine, with reports of another being explored in the Tondo region.²⁶ Discussions are reportedly underway with Gécamines to cede license areas currently held for large-scale mining activities to ZEAs. But it is still unclear whether seven ZEAs would be sufficient to employ all artisanal cobalt miners in the region. In public forums, EGC representatives recognised the challenge of enforcing its monopsony in a way that responds to miners whose livelihoods depend on cobalt, whilst also ensuring the quantities of artisanal cobalt production are able to meet demand.²⁷ Details remain scarce on how the EGC plans to scale its model in an inclusive manner.

One challenge will be the relatively short timescale ASM cobalt miners will have to comply with new EGC regulations – only 60 days according to the decrees creating ARECOMS (or 6 months according to statements made by EGC representatives) – in addition to the extra costs that compliance will likely incur.²⁸ Thus, the vast majority of the artisanal cobalt sector could soon be excluded from the formal supply chain markets by failing to meet the requirements set out in the EGC's Standard – potentially creating a sizeable black market trade.

BOX 1. THE ENTREPRISE GÉNÉRALE DU COBALT PARTNERS WITH TRAFIGURA AND OTHERS

In November 2020, EGC announced an agreement with international commodities trader, Trafigura, the global NGO, PACT, and due diligence consultancy firm, Kumi Consulting. This partnership is for the mining, processing and trading of artisanal cobalt with Trafigura acting as a buyer of 50% of cobalt production – what is referred to as an “offtake agreement”.^x

Though EGC and Trafigura have agreed to a pricing mechanism for this partnership, the details have not been made publicly available. However, they have reportedly agreed that the price paid to artisanal miners should be set at a level that ensures a decent livelihood for miners.²⁵ The partnership will also invest in “bagging and tagging” systems for artisanal cobalt, and electronic data gathering, that could allow artisanal cobalt to be traced from mine to international market. At the time of publication, the EGC-Trafigura agreement(s) has yet to be published, a requirement according to Congolese law.²⁹

Meeting the EGC's Responsible Sourcing Standard²¹ will be a requirement for all cobalt bought by Trafigura. Communications from Trafigura suggest the EGC standard will go “above and beyond” what newly formed regulator, ARECOMS, requires to ensure buyer confidence, and thus is “the standard that matters most”.³⁰ Key aspects of the EGC's Standard include stipulations that artisanal cobalt pit depths do

not exceed 10 metres and that tunnelling by artisanal miners is forbidden for safety reasons; Personal Protective Equipment (PPE) is to be provided to artisanal miners; and workers are to carry site registration ID at all times.²¹ However, significant investments will be needed to support artisanal miners to meet these standards.

The Trafigura-EGC partnership includes financing for the creation of ZEAs, the provision of machinery to excavate ore for artisanal miners and additional investments to ensure the transparent and traceable delivery of cobalt hydroxide.²⁶ PACT's role within the partnership, which has been funded by Trafigura, is to deliver socio-economic programmes to improve the health and safety, human rights, traceability, economic empowerment, child labour, certification of artisanal cobalt and support to cooperatives.

The EGC Standard was, to a large extent, informed by lessons learned by Trafigura and PACT during the Mutoshi pilot programme (see box 3 p 20). A socio-economic assessment of that programme, commissioned by Trafigura, although without a baseline comparison, considered the perspectives of approximately 140 miners.³¹ Miners' inputs are said to be informing the implementation of the EGC's Standard. Close monitoring and evaluation of the roll out of this Standard will be important to ensure positive benefits to artisanal miners.

^xPress reports also indicate the EGC could sell 50% of cobalt production to buyers other than Trafigura according to their offtake agreement, though no other buyers have been publicly announced at the time of writing. See Reid (2021).

The current state of play raises a number of key questions, including:

- How will the implementation and roll out of the EGC's monopsony and Sourcing Standard be managed to ensure it does not exclude miners from the sector who are unable to immediately meet the requirements?
- How are the costs, risks and benefits of the EGC-Trafigura Sourcing standard distributed across the supply chain, and in particular what are the impacts on the artisanal miner?³²
- Will there be a continued role for local cobalt traders in the EGC monopsony system or will their role in the value chain be eliminated? What impact will this have on competitive pricing and ensuring independence in grading and price setting – key issues for miners that often suffer from lack of transparency and accountability, including government involvement in transparent and predatory pricing practices?
- In a scenario of global oversupply, will EGC cut off ASM cobalt production to stabilise prices?
- Will EGC's monopsony buying arrangement increase, stabilise or decrease prices paid to artisanal miners compared to the existing open market?

2.2 Understanding ARECOMS

The ARECOMS is a government institution with the mandate to regulate the artisanal cobalt sector.³³ The new agency has broad powers and responsibilities, including:

- Conducting inspections at mine sites to ensure compliance with DRC's mining laws and the EGC's Responsible Sourcing Standard;
- Delivering "certificates of conformity" to compliant ASM cobalt to facilitate its processing and export;
- Protecting the EGC's monopsony by taking action against informal and illegal ASM cobalt production and processing;
- Designing alternative livelihoods programmes to support artisanal mining communities;
- Regular publication of strategic mineral export prices;
- Proposing reforms to the legislative framework governing the artisanal production and trade of strategic minerals.

Whilst detail on the planned implementation of the EGC Sourcing Standard continues to emerge and ARECOMS is not yet operational, the DRC Ministry of Mines has indicated there may be scope for ARECOMS, EGC and their partners to work towards a gradual upgrading and formalisation of the artisanal sector.³⁴ This approach raises the following questions:

- What additional investments and policy changes are needed to ensure broad-based inclusion into the formal market that address the structural challenges within the sector? And who will pay for them?
- What role would ARECOMS play in facilitating the creation of a sufficient number of ZEAs to meet the needs of artisanal miners?

BOX 2. EMERGING “RESPONSIBLE” COBALT SOURCING INITIATIVES DRIVEN BY MULTINATIONAL COMPANIES

In January 2021, ARECOMS announced it was joining forces with the CAP companies, NGOs and local stakeholders seeking to foster transparent and responsible cobalt supply chains. The joint initiative aims to:^{35 36 37}

- Establish a single common framework for cobalt ASM operations (see below);
- Encourage investment in field projects, as well as the formalisation and professionalisation of artisanal cobalt mining;
- Identify and establish best practices that can be tested, replicated and scaled, and strengthen the capabilities of artisanal operators in the cobalt supply chain;
- Strengthen the regulation of artisanal activity, particularly that of strategic substances such as cobalt, in line with CAP's vision and the decree creating ARECOMS

A framework for cobalt ASM operations

The Fair Cobalt Alliance (FCA), which was launched in 2020 to improve conditions in DRC's cobalt mines, and counts Fairphone, Signify, Glencore, Huayou Cobalt and Tesla among its members, has developed a framework for engagement with and investment in DRC's artisanal cobalt sector. This framework is part of a broader programme of work in which the FCA plans to promote responsible mining practices and to

channel investment to mine sites. It was developed in collaboration with the Responsible Cobalt Initiative (an initiative of the China Chamber of Commerce of Metals, Minerals and Chemicals Importers and Exporters (CCCIMC)³⁸, the Responsible Minerals Initiative (RMI) and FCA.

The draft framework includes close to 100 operational “requirements”, mostly to be implemented by artisanal mining cooperatives. These requirements have been developed to align with the BGR's Certified Trading Chains (CTC), as well as with national legislation and the OECD Due Diligence Guidance for Responsible Supply Chains for Minerals from Conflict Affected and High-Risk Areas. At the time of writing the CAP is holding local and international consultations to finalise a range of requirements that align with international corporate expectations for engaging with, investing in and sourcing from artisanal miners, including investing in workplace safety improvements and legal compliance at the mine site.³⁹

The ASM cobalt framework claims to promote a “step wise” approach that aims for the gradual and broad-based inclusion of artisanal miners in meeting various social, governance and environmental requirements. Whilst there appears to be scope for complementary initiatives and investments to support artisanal miners, it is unclear at the time of publication how this kaleidoscope of initiatives will work together and how they will impact ASM cobalt.

³⁸ A website was created to crowdsource comments on the draft framework: <https://www.asm-cobalt.org/>

Identifying the obstacles to progress

3

The Congolese artisanal miners, local civil society and public sector stakeholders that we interviewed identified several key obstacles to change within the governance of the artisanal cobalt sector, as multinational companies seek to “de-risk” their supply chains.

In this section, we explore the ways in which denial, disengagement, and sourcing standards that are not inclusive of local interests are unlikely to resolve the myriad of issues facing the artisanal cobalt sector. What we argue for is structural change, along with cultural shifts in private and public sector policy making, that recognise artisanal miners as legitimate players in the sector whilst ensuring their livelihoods and rights are supported.

3.1 Perceptions of international supply chain sourcing initiatives

Negative associations with artisanally produced cobalt, in part driven by Amnesty International and Afreewatch’s 2016 report on child labour, has led many companies to deny the presence of artisanally-mined cobalt from the DRC in their supply chains because of associated reputational and legal/ due diligence/ human rights liabilities.^{xii} Some companies, unable to source “illegal” (i.e. informal) cobalt, have completely disengaged from DRC’s ASM cobalt sector, while reputational risk has caused large-scale miners to sell Congolese cobalt at a discount. Yet the scale of artisanal cobalt production (estimated at 10-30% of DRC’s total cobalt production depending on the year),^{xiii} and the opaqueness of supply chain relationships from artisanal cooperatives to cobalt depots to exporting refineries,^{xiv} suggests it may be difficult for end consumers to guarantee there is no artisanal production in their products. De-risking and disengagement have potentially devastating impacts on the livelihoods of miners and their dependents,^{xv 39} who have a weak social safety net and few viable alternatives to mining in the short term. It is no solution for the development challenges facing the ASM sector.

Some companies have been involved in nascent responsible ASM cobalt sourcing programmes that aim to mitigate supply chain risks. This has led to

a raft of supply chain initiatives in recent years,^{xvi 40} including the Global Battery Alliance – with its CAP pillar,⁴¹ the Fair Cobalt Alliance – engaging with miners at the local level and currently working closely with CAP to further develop the ASM Cobalt framework for engagement,⁴² Trafigura/ PACT – through the Mutoshi Pilot Project⁴³ and now partnership with EGC (outlined above), and the Cobalt for Development programme – a collaboration between BMW, BASF, Samsung SDI, Samsung Electronics and GIZ to invest in livelihoods and cooperative capacity-building (does not involve sourcing).⁴⁴

Whilst it is important to recognise the differences between the initiatives, and efforts made by each to engage and consult with local communities, the artisanal miners, local government officials and NGO staff that we interviewed in Kolwezi and Lubumbashi between December 2020 and March 2021 expressed frustration that (1) local actors are not sufficiently represented in international supply chain initiatives and (2) local concerns have, thus far, not been adequately considered in the design of these initiatives.

Given the relative infancy of cobalt supply chain initiatives at the time of the research – some still in preliminary discussion phase only – many of these responses are based on frustrations that large international companies use their significant market power to initiate reforms over the heads of government and artisanal miners. Interviewees were also frustrated by the perception that broad sustainable development and human rights issues may be tackled by a supply chain standard alone – without proper consideration to environmental impacts, fraud and tax evasion, forced expulsion by large-scale miners and the government, and extortion of artisanal miners among other problems.⁴⁵

Many respondents criticised what they saw as a “waste” of valuable financial resources that could be better invested in addressing priority issues such as the creation of viable ZEAs, legal mining permits for cooperatives, fair pricing and security concerns. Responsible sourcing standards were seen as duplicating existing “home grown” initiatives, which could be upgraded rather than replaced with new schemes.^{xvii} For example, the Congolese government

^{xii} International Rights Advocates has initiated a class action lawsuit in US courts against major multinationals for their alleged complicity in purchasing cobalt produced using child labour. See this BBC news article from December 2019: <https://www.bbc.co.uk/news/world-africa-50812616>.

^{xiii} Estimates vary considerably, from 10% to 30% (Al Barazi *et al.*, 2017, Rubbers, 2019: 9, BGR, 2019), and up to 40% according to Todd Frankel’s story for the *Washington Times* (“The Cobalt Pipeline”, September 30, 2016). Actual production figures vary widely year on year based upon cobalt’s price levels.

^{xiv} BGR (2021:33) mapped these commercial relationships.

^{xv} See for example Huayou Cobalt decision to stop purchasing cobalt from two the artisanal mines of Kasulo and Kamilombe in response to human-rights concerns.

^{xvi} See NIRAS International Consulting (2020) for a more detailed overview of the range of initiatives currently operating in the sector.

^{xvii} Focus group interviewees for our research – including Congolese government officials, CSOs and artisanal miners – recommend that multinational companies work with domestic institutions to produce ASM cobalt following standards that would allow for market uptake rather than creating new responsible sourcing initiatives.

– in partnership with local civil society organisations and donor agencies – has adopted an action plan to combat child labour in artisanal mining which has failed to make an impact due to inappropriate project design and lagging implementation.⁴⁶ Meanwhile, interviewees perceived multinational companies as being driven by a myopic focus on child labour while failing to recognise the structural challenges underpinning hazardous working conditions and an unfair distribution of value throughout the supply chain. Supply chain initiatives were perceived to be designed not with artisanal miners' needs in mind, but to benefit mid- and downstream companies^{xviii} wanting to meet the insatiable demands of consumers in high-income countries.

Though they recognised that significant sums of money are being invested in the ASM cobalt sector, respondents shared the perception that investments by private companies and international development agencies were benefiting NGOs and consultants but producing little tangible impact.^{xix}

The following quotes identify particular concerns of diverse Congolese stakeholders:^{xx}

“As long as there are no ZEAs, how can these initiatives expect to have any impact?”
Congolese government official

“If these initiatives want to tackle child labour, why are they only working with cooperatives where there is no child labour?” Member of a Congolese artisanal mining cooperative

“International supply chain traceability initiatives don't contribute to solving the major problems facing the artisanal [cobalt] mining sector”
Congolese artisanal miner

Interview respondents questioned the rationale for these initiatives, particularly their focus on working with cooperatives in ASM mine sites that have already achieved a high degree of formalisation. If responsible sourcing initiatives limit their geographic scope to a small number of existing high performing ASM mine sites, they risk creating “islands of responsibility” to feed fast-expanding supply chains while failing to catalyse structural improvements to the entire ASM cobalt operating environment and thus achieve impact at scale.

Critical to recognise the legitimacy of artisanal miners

The specific contents of private sector sourcing standards and the governance of bodies overseeing standards are contentious because their design can have far-reaching impacts on how the Congolese government and international markets treat artisanally-produced cobalt beyond the specific mine sites where companies are directly engaged.

Since industry standards are, in effect, privatising the formulation and implementation of public policy it is paramount that industry bodies integrate the legitimate representatives of artisanal miners and relevant CSOs into decision-making structures and hold public consultations open to all miners when designing policy frameworks. Of the three industry initiatives profiled above – CAP, FCA and the EGC-Trafigura – all need to do more to create governance structures that integrate artisanal miners, Congolese civil society organisations and other local actors into decision-making roles in a meaningful way (including sufficient representation relative to other stakeholder groups and real decision-making power).

The EGC-Trafigura sourcing standard and associated pricing mechanism, was not subject to public comment prior to finalisation, though PACT carried out limited mine-site consultations with artisanal miners on behalf of Trafigura. Limited inputs were solicited from artisanal miners through interviews at two mining sites when drafting the FCA sourcing framework, which was subsequently merged with the CAP's own framework. FCA and CAP are organising public consultations for inputs into the draft framework at the time of writing.

In correspondence and interviews with private sector actors, many conflated the process of consulting artisanal miners with devolving power to artisanal miners. None of these initiatives have carved out meaningful space in their governance structures for artisanal miners and thus, there remain questions about their legitimacy.

Mathy Stanislaus, former Director of Public Policy and Engagement for the Global Battery Alliance, commented:⁴⁷

“Most of the companies are transactionally focused, few are truly looking at underlying and broader issues [...] So much focus on reputational impact, expediting the transaction and less on underlying

^{xviii} “They [the supply chain initiatives] are a way for powerful companies to preserve a monopoly on the purchase of Congolese cobalt.” Congolese government official

^{xix} “Multinationals are injecting millions into development projects that are primarily benefitting the same NGOs.” Representative of a Congo-based mining company

^{xx} Comments collated from a range of stakeholder responses engaged as part of the primary research in Kolwezi and Lubumbashi in December-March 2020. For example “The basic question [...] whether there has been even preliminary work to explain the substance of these initiatives and to enable the participation of national and local actors and to ensure their sustainability. [...] Based on the experience [of past supply chain traceability initiatives] in the mining sector, we need to talk about self-traceability, self-certification and self-control of our mineral resources. To not only strengthen local initiatives, especially the [Congolese government's ASM] procedures manual, with a little [political] will to do better and do it seriously.” Congolese researcher.

conditions and fair pricing, as well as security related issues [...] [what is needed] is a cultural change about how to authentically build multi-stakeholder engagement that recognises the difference in the playing field and that civil society have far more challenges to participate. Equally important to building this infrastructure is changing the culture of participation to get it right. Moreover, merely delegating tasks to not-for-profit intermediaries is not enough. The hope in authentic multi stakeholder efforts such as the GBA is to establish the mechanism for levelling the playing field to ensure full participation of stakeholders at the seat of decision making, with a focus on civil society, in the design and implementation of programs."

Key to this culture shift will be recognising DRC's artisanal miners, who are estimated to produce 10-30% of Congo's cobalt, as legitimate actors whose voices should be heard.

Influential multinational companies – with significant production, refining and purchasing power – are in a position to engage with the DRC government, industry bodies and Congolese civil society groups to catalyse support for artisanal cobalt miners.

International initiatives must be designed with an appreciation of the daily realities of artisanal miners. For example, looking at PPE requires understanding first why miners avoid wearing it – hot and dusty conditions underground make bulky equipment and clothing unmanageable. Efforts must also be made to understand the specific challenges of women (estimated to comprise between 30-50% of the global ASM sector – although far less in the DRC's cobalt sector, where women are culturally excluded from

mining activities), to ensure gender justice is embedded in ASM cobalt governance initiatives. Though women are exposed to the same dangers as men in DRC's artisanal cobalt sector, research indicates that their invisibility means they suffer disproportionately the effects of dangerous working conditions, degraded health, harsh manual labour, increased domestic workloads and sexual violence.¹²

The sequencing of policy interventions will be critical to effective change. Many multinationals expect artisanal mines to comply with best practice mine-site safety and environmental regulations prior to agreeing to source. Yet very few miners have the financial means, technical capacity or incentives to adopt these standards without large investments and guaranteed return on investment.^{xxi}

To be considered "responsible" multinational companies must listen to local stakeholders. Companies will need to promote "pro artisanal miner" reforms to drastically increase supply chain transparency, support pricing structures based on notions of shared value and living income for artisanal miners, work with their partners to relinquish license areas to artisanal cooperatives, invest in the creation of genuine worker-led cooperatives, pay for the cost of upgrading artisanal mining practices and associated supply chain due diligence, and end mine-site expulsions *prior* to implementing responsible sourcing initiatives.

In addition, there is opportunity to learn lessons from the impact of previous extraterritorial supply chain regulations, including the Dodd-Frank Act and related certification schemes governing the 3Ts (tin, tantalum, tungsten) and gold, which have significantly reshaped ASM production.^{xxii 48 49}

Recommendations

- Enable participatory decision-making by meaningfully integrating artisanal miners – women and men – and Congolese civil society into ASM supply chain governance structures;
- Private sector actors must work with their commercial partners throughout the entire value chain to prioritise "pro ASM" policy reforms prior to imposing responsible sourcing requirements;
- Improved collaboration between industry, government and artisanal miners to build on home-grown initiatives by Congolese actors thus avoiding duplication of efforts;
- Publish audited and open access supply chain data (at the sector level) to allow artisanal miners to understand both the pathway to market for ASM cobalt and distribution of value capture throughout each link in the supply chain.^{xxiii 50 51 52} As EGC becomes operational, Congo's Extractive Industry Transparency Initiative (EITI) reports should robustly report trading data.

^{xxi} In correspondence with the authors of this report, FCA representatives stated they are responding to this issue by promoting "sourcing as we invest" – with conditions on site on day one still acceptable to source – and leveraging financing opportunities to invest where there is long term potential but no immediate business case for supply chain investment 31 August 2021.

^{xxii} For critical reporting on the ramifications of Dodd-Frank for Congolese artisanal miners, see Freudenthal (2017) and for analysis on the impact of the Just Gold project in the Eastern DRC see Katho *et al.* (2021).

^{xxiii} This type of data transparency and analysis has been produced in many commodities sectors. For Bananas, see BASIC (2015) and Roquigny *et al.* (2008), and for tea, see Cameron and Mkomba (2015).

3.2 Special Artisanal Mining Zones and large-scale mining

The revised 2018 Mining Code requires that artisanal mining in the DRC take place within ZEAs, but this is not straightforward.

Today, the majority of artisanal miners, including large numbers of female miners, operate on so called “tolerance zones” – where unlicensed artisanal mining takes place inside permit areas held by large-scale mining companies. Germany’s Federal Institute for Geosciences and Natural Resources (BGR) found 44 out of the 53 mine sites it studied (believed to be approximately half of the ASM cobalt mine sites in the Haut-Katanga and Lualaba Provinces at the time) were in tolerance zones on industrial mining concessions, a further five on industrial mine tailings and one on an exploration license. Only three were on a ZEA.^{xxiv 53}

Though technically illegal, tolerance zones have tacit approval from the Congolese government, large-scale mining license concessionaires, and cobalt traders. Our research further identified local traders who generally pre-finance capital costs to establish artisanal mines in tolerance zones in exchange for a monopsony on purchasing production. Provincial government representatives give unofficial approval to such practices. The greatest sustainable development and human rights challenges facing the artisanal cobalt extraction, including child labour and the sexual exploitation of women, are generally found in tolerance zones and industrial mine tailings.

Many large-scale mining companies refuse to formalise the presence of artisanal miners working on tolerance zones inside their concessions due to potential legal liabilities for workplace accidents. There is also currently no legal basis in Congolese law allowing artisanal mining on large-scale concessions – making any attempts to “co-exist” inherently illegal.^{xxv 54 55 56} Some industrial mining companies have supported the expulsion of artisanal miners from tolerance zones, which has led to outbreaks of serious violence.^{xxvi} Cuvelier (2020) describes how the vilification of artisanal miners by key government and industry officials contributes to their removal from large-scale concessions:

“In the discourse of Congolese policymakers and representatives of industrial mining companies,

artisanal miners are often likened to animals that lead an underground existence and that continuously move in and out of sight in a disturbing manner. The destructive potential of artisanal miners – who are digging holes where they are not supposed to be digging - is presented as a legitimate reason for taking very harsh, repressive measures against them, much in the same way as gardeners use spades to get rid of moles ruining their gardens.”⁸

Barriers to creating ZEAs

The logic behind ZEAs is clear – if artisanal mining activity was concentrated in a permit area, it would be easier to monitor compliance with critical social, environmental and workplace safety rules. And there would be no overlap with large-scale concessions. The success of formalisation, DRC government regulatory efforts, and international responsible sourcing initiatives are all contingent, and legally pinned upon, the creation of ZEAs. Yet creating ZEAs faces numerous barriers.

To be “viable” for artisanal mining, an area under a ZEA license needs to meet the following criteria:

- Proven **high grade, ideally surface level cobalt deposits** suitable for artisanal extraction (with geological surveys estimated to cost in the region of \$1 million);⁶
- **Groundworks** using heavy machinery to prepare the land for artisanal mining and prevent excessive tunneling;
- Functioning worker-driven **cooperatives** to meet DRC legal requirements and the EGC sourcing standard;
- Location in an area **accessible** to markets/trading centres, usually centered around the road between Kolwezi and Lubumbashi, and near artisanal mining towns (cognisant of research that posits mine sites too close to residential areas are believed to increase the likelihood of child labour).⁵⁷
- **Transparent market and trading services** including multiple *comptoirs* (generating a market for competitive pricing that take into account the labour and value generated by artisanal miners) and independent laboratory assessments of weight and purity (see further section below and possible complications brought in by EGC’s monopsony on the market).

^{xxiv} See research methodology and sampling detailed in BGR (2019), which was followed again for the 2020 research (2021 publication)

^{xxv} Models of co-existence between artisanal and large-scale mining are receiving renewed attention in the literature and in global initiatives, such as the 2020 agreement by the Alliance for Responsible Mining (ARM) and the Initiative for Responsible Mining Assurance (IRMA) to promote collaborative approaches between large and small-scale mining (see ARM, 2020). Academic articles on this topic are mixed in their support but provide interesting insights into the possible models and challenges. See for example Hilson *et al.* (2020) and Luning and Pijpers (2017).

^{xxvi} See ICG account of expulsions at the Tenke mine for example.

Additionally, there exist three significant roadblocks to establishing viable ZEAs:

- First is a legal system and policy approach that prioritises the granting of large-scale mining licenses and leaves little to no space for artisanal mining (see Congo's online mining cadastre which illustrates the coverage of large-scale research and exploitation permits across the DRC's Copperbelt).⁵⁸
- Second, the DRC's mining code states in its Article 109 that the Minister of Mines is able to close a ZEA with 60 days' notice if it is found to have deposit that can be exploited by industrial means. This may disincentivise the substantial investments needed to create viable ZEAs, which in the case of cobalt includes geological surveys to prove the mineral wealth, proven viability for artisanal mining techniques and mechanised "groundworks" to remove the topsoil layer and prevent excessive tunnelling.
- Third, there are political economy factors – Congolese elites and certain cobalt supply chain actors who are benefiting from the status quo of "authorised, but informal" mining in tolerance zones have little incentive to shift to the ZEA model. One interviewee claimed that previously Gécamines had ceded land to the national government for the creation of ZEAs, which was then allocated to political elites.⁵⁹ Officials from a range of different government and security agencies control access to tolerance zones and demand unofficial "taxes" and fees from artisanal miners.⁶⁰

Based upon our field visits in 2020/2021 and lessons derived from pilot projects like Mutoshi (see Box 3), we predict responsible sourcing initiatives will eradicate

child labour inside the limited number of registered ZEAs. But since there are so few operational ZEAs, problematic practices such as child labour will likely be displaced to informal cobalt sites while some children may move into other, potentially riskier, economic activities.

Scalable improvements in the artisanal cobalt sector are not possible without an equitable allocation of viable ZEAs to allow existing artisanal miners, as well as those looking to join the sector (including women, who are largely excluded at the moment, and young working age people), to access cobalt reserves. Artisanal miners are unlikely to be able to address occupational hazards if contingent on a ZEA being in place. For example, dangerous tunnelling, which can cause tunnels to collapse and miners to die, can be avoided by hiring heavy machinery to remove earth and allow miners to safely reach deeper cobalt reserves (although heavy machinery is currently not permitted on ZEAs under Congolese law). However, hiring such machinery would be a risky investment without a ZEA license. These challenges are not unique to the cobalt sector, but endemic, structural barriers faced by artisanal miners in many countries.

The EGC and multinational companies interviewed for this research indicated they would not purchase cobalt produced in tolerance zones. They posit that all miners should transition to working inside ZEAs. But the dearth of viable ZEAs makes mining in tolerance zones, and the human rights challenges associated with it, the default method of extraction.

Recommendations

- The DRC government, mid-downstream multinational cobalt buyers, and industrial mining companies should work with artisanal mining cooperatives to make viable deposits available for ZEAs. This will require participatory decision-making processes that elevate artisanal miners' views to ensure ZEAs meet the needs of miners and of local communities;
- Gécamines and industrial mining permit holders should cede license areas to artisanal mining cooperatives for ZEAs, according to provisions laid out in Article 30 of the Mining Code. Large multinational buyers of cobalt should support this process by demanding their commercial partners to cede permit areas to ZEAs;
- The DRC government should sponsor geological research for artisanal miners. One option may be to dovetail with the World Bank's efforts in this area or the exploration efforts of industrial mining companies;
- The sections of the 2018 Mining Code that allow government to withdraw ZEA licenses at 60 days' notice should be revised. Artisanal miners should benefit from the greater regulatory stability since they are required to make substantial and risky investments;
- The legal basis for subcontracting should be examined further along with research into viability and appropriateness of these models and the elements that may achieve or undermine success for artisanal miners, their communities, national governments and industrial mining companies.

BOX 3. SUB-CONTRACTING ARTISANAL MINERS – THE MUTOSHI MINE EXPERIENCE

A small number of large-scale mining companies have entered into sub-contracting arrangements with artisanal mining cooperatives to “formalise” their presence.

In 2018, Trafigura entered into a buying agreement with Chemaf (the Congolese subsidiary of Shalina Resources Ltd – headquartered in the UAE with offices in China) to source cobalt from its Mutoshi mine in Lubumbashi.⁶¹ Chemaf, which holds a large-scale mining license, established a commercial sourcing agreement with the artisanal mining cooperative, COMIAKOL. Trafigura hired PACT to monitor compliance with the OECD Due Diligence Guidance and Trafigura's sourcing standards at the mine site.⁴¹

The Mutoshi model received mixed reviews from the people we interviewed including local miners, civil society and some international civil society and private sector stakeholders. Interviewees held positive views of workplace safety measures, such as limiting pit depths to 10 metres and avoiding tunnelling by hiring machinery to conduct groundworks, and obligatory use of PPE. Trafigura's own analysis of the programme, although without baseline data for comparison, identified increases in productivity (attributed to groundworks, geological data and improved organisation), reduced costs to miners, less dangerous and more hygienic working conditions, creation of new local businesses and increased income for women when compared to women working in mines outside the Mutoshi project area.⁶²

However, WEF's (2020) analysis highlighted several potential challenges to this model. For example, it noted that PPE needed to be replaced after just one year of use, at a cost of \$120,000 for 5,000 miners.^{xxvii} PACT's due diligence role in overseeing and managing the implementation of standards at the Mutoshi mine also comes at a significant cost. There is disagreement in the existing literature about whether due diligence costs have fallen disproportionately on artisanal miners as some anecdotal price data indicates artisanal miners

received less for their cobalt at Mutoshi compared to the open market, while other research states the opposite.^{7 10 xxviii}

Data from the Mutoshi mine shows that miners receive a lower price for their cobalt compared to the open market, presumably to cover the costs of investments made in health and safety for the workers.⁸ Whilst the workplace safety benefits of these investments are clear, miners are having to make a choice between higher income and workplace safety. Putting the costs of compliance on the artisanal miners, instead of multinational companies in the value chain, raises questions about the financial sustainability and fairness of these models.

The implementation of the Mutoshi programme raised concerns about the viability of the “sub-contracting” model, in particular, the impact of changes in mining company's business strategy and failure to provide any legal protections to artisanal miners working within these programmes. Chemaf and Trafigura suspended the Mutoshi scheme with the onset of Covid in 2020 and Chemaf's decision to pursue large-scale cobalt extraction. In December 2020, Chemaf's Mutoshi offices were ransacked by artisanal miners who had been refused access to the site.⁶³ Artisanal miners interviewed explained the property destruction was a reaction to Chemaf's decision to permanently end its sub-contracting arrangement with COMIAKOL to pursue large-scale mining exploration and extraction.⁶⁴ Sub-contracting arrangements at other mine sites have led to violent conflict, which calls into question the expediency of this model.⁶⁵

There are questions about the legal foundation for the sub-contracting arrangement between Chemaf and COMIAKOL since DRC's mining code states large-scale companies can cede permit areas to ZEAs, but does not allow for sub-contracting arrangements.^{xxix} The 2018 Mining Code fails therefore to provide legal protection to artisanal miners at risk of forcible eviction due to the requirement that artisanal mining to take place inside ZEAs, and are not otherwise legally recognised.

^{xxvii} Trafigura stated in correspondence with the authors of this report that PPE costs were covered by Trafigura and Chemaf at the Mutoshi pilot.

^{xxviii} In correspondence, Trafigura stated that due diligence costs were covered entirely by Chemaf and Trafigura, not artisanal miners.

^{xxix} The International Crisis Group (<https://www.crisisgroup.org/africa/central-africa/democratic-republic-congo/290-mineral-concessions-avoiding-conflict-dr-congos-mining-heartland>) recommends the Congolese government promote sub-contracting between large-scale miners and artisanal cooperatives. The ICG report repeatedly asserts that subcontracting is allowed, though the report does not provide any legal citations to back up this assertion. Umpula-Nkumba argues rather that the law only “allows the perimeter of a ZEA to be superimposed on a PE or Research Permit (PR), with the express written consent of the holder. In this case, the latter must **relinquish** the part on which artisanal exploitation takes place. After this procedure, the State takes back the ownership of the renounced part and allocates it to the cooperatives. In practice, this principle is not respected” (our emphasis). The OECD notes that the Ministry of Mines has granted exceptions (*dérogations*) to the law by allowing, in certain cases, large-scale permit holders to sub-contract permit areas to artisanal miner cooperatives.

3.3 Sector organisation and cooperatives

Inclusive and broad formalisation of artisanal cobalt will not be possible without dynamic worker-led cooperatives. Yet cooperative structures within the cobalt sector face both bureaucratic and governance challenges including political co-optation, under representation of miners' rights, difficulties accessing mineral rights, inexperience with financial management and obstacles to obtaining appropriate financial services.⁶⁶

Since 2018, DRC's mineral law has required that artisanal miners form cooperatives⁶⁷ to be able to mine legally in ZEAs. These provisions are key components of the government and international supply chain actors' strategy to formalise the artisanal sector. But Faber *et al.* (2017) and others have pointed to a limited uptake of cooperative structures by artisanal miners – 65% of the 15,000 miners they interviewed did not belong to a cooperative.⁵⁴ Although participation in cooperatives has likely increased since the 2018 mining law made it obligatory, anecdotal evidence gathered from interviewees as part of this research revealed a common perception that cooperatives rarely act in miners' interests due to political co-optation.

According to the Organisation for the Harmonization of Business Law in Africa (OHADA), members of a cooperative organisation should be shareholders in the cooperative, representative of their contributions.⁶⁸ However, recent research has shown that many miners are not shareholders in cooperatives in the DRC Copperbelt.^{xxx} Though there are exceptions, mining cooperatives in the DRC are generally subject to local elite capture – with politically connected bosses demanding “unofficial payments” valued up to 20% of production.^{57 69} Artisans consider cooperatives to be yet another “mechanism of state control” imposed on them,⁷⁰ which increases taxation and returns on their labour for other actors, but provides little tangible benefit in return.

Successful cooperatives require access to finance to invest and upscale artisanal mining activities. As many cooperatives operate in “tolerance zones” on industrial mining concessions, they have no legal mining permit with which to access finance. This causes cooperatives to enter into predatory financing-purchasing arrangements with *comptoirs*, who currently set the rules in most mine sites.

If the status quo persists, a small number of ZEAs will be dominated by a small number of politically connected cooperatives at the expense of a large portion of ASM cobalt workers. ARECOMS, along with international development agencies and supply chain actors, must invest significant financial and technical resources into reshaping the ASM cooperative environment. This includes taking steps to promote gender equality in mining cooperatives by encouraging women's membership and involvement in decision-making/ management.

Nothing in DRC law prevents women from entering and working in artisanal mine sites yet women are often obstructed from equitably participating in mining by discriminatory beliefs that they bring bad luck to mining sites or aren't strong enough to mine. Germany's BGR estimates women comprise just 3% of members of registered cooperatives and are often denied access to mine sites even when they are in leadership positions.⁹ This prejudice is so pervasive that many women are unaware of their legal rights to engage in mining activities¹² and instead are often found in “tolerance zones”, and working on mine tailings, where cobalt ores require washing. This hazardous job involves being submerged in ponds with heavy metal content, which often results in them developing skin diseases and infections.^{xxxii}

Yet research on artisanal mining shows that despite discrimination and relegation to lower status and lower paid roles, women choose to work in the sector for want of viable economic alternatives or because mining pays better than alternatives.⁷¹ It is therefore imperative that their priorities and specific needs are sufficiently understood and represented in cooperative structures and in broader efforts to promote gender equality.⁷²

^{xxx} See for example Umpula-Nkumba (2020)

^{xxxii} One female artisanal miner interviewed stated “Our [women's] job is to wash the minerals [...] during the high season we work in water for hours a day [...] which exposes us to skin diseases and vaginal infections.”

Recommendations

- Government regulators should crack down on the creation of cooperatives that are owned by political elites in violation of OHADA provisions;
- Government should simplify procedures and reduce the cost of cooperative registration;
- Private supply chain companies, ARECOMS and DRC's international development partners should invest in the establishment of democratic and gender inclusive worker-led cooperatives;
- The DRC should consider instituting gender equality governance requirements as a pre-requisite for the creation of cooperatives and the granting of ZEAs. In the meantime, the Ministry of Mines should consider granting ZEAs to women-only cooperatives;
- Further research is needed to understand the specific challenges and priorities of women in the ASM cobalt field in order to effectively embed gender justice within the sector;
- All stakeholders should support campaigns that change social norms and reduce stigma around women's participation in mining;
- Private sector actors should develop gender responsive due diligence guidance that can be incorporated into sourcing standards.^{73 74 75} Large multinational downstream companies should pressure their supply chain partners to promote gender equality in sourcing arrangements.

3.4 Fair price and due diligence costs

The price paid for cobalt (and associated copper) is the main determinant of artisanal miners' incomes and livelihoods. Thus, fair prices and fair processes for agreeing on price are critical issues for artisanal miners.

Artisanal miners interviewed for this paper, backed by findings in academic literature, described regular exploitation by trading companies, local and mining police, national secret service, artisanal mine "bosses", industrial mining companies and local traders.⁸ Miners are pressured to pay "unofficial taxes" to these actors but are underpaid for their product. Additionally, assessments of the purity and weight of artisanal cobalt production by traders are regularly subject to fraud.^{76 77} Miners produce both copper and cobalt are only paid for one mineral – the trader taking the other as "tax".^{12 78} When the Covid-19 pandemic began, many miners were forced to sell cobalt for just a third of its true value for several months until prices rebounded and international traders returned.

The monopsony buying structures that are common in the sector trap miners in unequal trading relationships. Given the power held by *comptoirs*, that pre-finance capital costs to set up ASM mine sites, artisans have weak leverage to dispute the prices they are offered, as do ASM cooperatives which depend financially on *comptoirs*.

FCA's *Digging for Change* report (2020) highlighted significant discrepancies in prices paid for cobalt with "informal, open-markets at Kapata and Musompo offer[ing] significantly higher prices than any of the controlled ASM sites – Kasulo, Kamilombe and Mutoshi,"⁷⁷ while others have observed higher prices at Kasulo compared to Musompo.^{xxxiii} Though mining companies and cobalt offtakers operating in these controlled sites generally pay lower prices, their investments can increase productivity, improve workplace safety and lead to higher mineral grades, which benefit artisanal miners.

To date, the State has done little to intervene in the market to ensure a fair and level playing field. At the time of writing, none of the sourcing initiatives described in this report, have developed criteria for what constitutes fair remuneration for artisanal mining labour. Calvão *et al.* (2021) posit "*the combined effect of wageless formalisation and corporate-led responsible mining enables the relocation of responsibility away from work protection and income security toward flexible precariousness.*"¹⁰ In other words, "responsible" multinational supply chain actors are requiring artisanal mining cooperatives to comply with a long list of ESG performance standards but offer no guaranteed income and insufficient employment benefits in exchange. The result is corporate led "responsible" sourcing:

^{xxxiii} Calvão *et al.* (2021) "Our observations showed that prices at Kasulo were slightly higher than in the free market at Musompo on the outskirts of Kolwezi, which suggests a comparatively good opportunity for miners working at Kasulo. This surprising observation can be explained by the minimization of intermediaries, as well as logistical and transport costs, made possible by the presence of the buying houses directly within the concession."

“[...] projects attract artisanal miners by facilitating access to working sites, namely by removing the first layer of sterile land, and ensuring safer working conditions. However, this approach rests on a narrow understanding of human security, from which social protection – against illness, job loss, or price fluctuations for instance – is excluded. Moreover, while a human security lens is mindful of the welfare of ordinary workers, the cases of miners utilized by companies without gainful employment raise the critical questions of what constitutes a fair compensation for the taxing labor of mining, as well as the inadvertent effects of a labour regime premised on added flexibility but decreased autonomy.”¹⁰

However, the introduction of the EGC, with a monopsony on purchasing, and of ARECOMS, to regulate artisanal cobalt production, have the potential to address the issues of predatory and unfair pricing. EGC has stated its intent to tackle issues identified by artisanal miners, such as purchasing both copper and cobalt and introducing a fair price that promotes local livelihoods.²⁷ Investments made in the open market in trading centres in Lualaba province, with newly built facilities at Musumpo, are also intended to address these challenges by introducing improved equipment and independent oversight in measuring the weight and purity of artisanal production.

Many artisanal miners and Congolese civil society organisations we spoke to laud the EGC’s statement of intent but expressed disappointment that it had failed to release details on the mechanics of fair pricing or published its sales agreement with Trafigura, which will likely significantly impact pricing.⁷⁹

Fair pricing for smallholder production is a recurrent debate across many commodity sectors from cobalt to gold, cocoa, coffee and tea. In 2019, the governments of Ghana and Ivory Coast – the two major producers of the world’s cocoa via smallholders – teamed up to create the “living income differential”⁸⁰ which requires cocoa buyers to pay a \$400/metric tonne premium to smallholders.⁸¹ This has significantly increased cocoa prices to the benefit of small farmers, though cocoa traders have warned the increased prices could cause global oversupply, leading to a price collapse that would offset the living income premium.⁸² In the world of ASM cobalt, we observed no equivalent discussion or initiatives to secure a living income for artisanal miners.

Artisanal miners we spoke to expressed concern about taking on the financial burden of meeting the requirements of private sector-led responsible sourcing initiatives. The OECD has published guidance recognising that such due diligence costs fall disproportionately on the smaller, upstream producers (including artisanal and small-scale miners) who often don’t have the liquidity and profit margin to offset these additional expenses.³¹ And yet ASM miners rarely capture the additional value from the investments pushed on to them by traders and processors/refiners (although *not* performing due diligence can reduce value/price in certain contexts).

Interviewees for this research suggest the trading dynamics between mine site and export are a “black box”,⁸³ thus more supply chain transparency is required from industry as a precursor to fairly distributing due diligence costs.

Recommendations

- Prices paid to artisanal miners should i) guarantee they receive a living income and ii) ensure artisanal miners capture a fair share of value generated by the cobalt they produce vis-à-vis other supply chain actors. To evaluate the distribution of value through each link in the supply chain, pricing data collected by supply chain actors and companies conducting due diligence must be made available for free in usable formats. Data should be audited and presented in aggregated form to avoid violating commercial confidentiality terms in contracts;
- All stakeholders should collaborate to implement independent weighing and assessment of purity for ASM cobalt, with multistakeholder oversight, to give artisanal miners confidence in cobalt transactions;
- Pricing at the local level must reflect both cobalt and copper content in ASM production;
- Midstream and downstream companies, especially large consumer brands, should absorb the cost of mine site due diligence and implementation of ESG standards for sourcing ASM cobalt.

Looking forward



Investigations into the use of child labour in DRC's artisanal cobalt mines turned the world's attention to practices in the sector and led to significant policy reforms. Scrutiny of the sector and in particular, the (un)sustainability of its supply chains, is unlikely to fade as the electric vehicle revolution drives ever-growing demand for cobalt, a key component in car batteries. The artisanal cobalt sector in the DRC, a vital driver of the country's economy, and the hundreds of thousands of small-scale miners engaged in it, are facing a period of structural change.

The creation of the EGC and ARECOMS, and nascent supply chain sourcing initiatives, have the potential to create long-lasting and meaningful changes for artisanally produced cobalt. But their legitimacy will depend on the ability of the DRC authorities, the EGC, industrial mining companies and their mid/upstream commercial partners to listen to artisanal miners, to promote pro-ASM reforms and to catalyse the emergence of a just and equitable ASM cobalt ecosystem. At present, the narrow focus of responsible sourcing initiatives risks creating "islands of responsibility" – a small number of artisanal cobalt mine sites that perform well on social, labour and environmental indicators, whilst potentially fuelling a burgeoning black market of miners who are unable to meet these higher standards. This approach will not produce positive impacts at scale but will allow multinationals to access coveted cobalt reserves. In line with the OECD Due Diligence guidance, mid- and down-stream companies must not abdicate their responsibilities by disengaging from supply chains where risks are identified but take action to address those issues by using their market power to produce structural reforms.

Prices paid to artisanal miners should guarantee that they can earn a living wage and capture a fair portion of the value created in the booming electric vehicle and consumer electronics industries. As multinational companies forge ahead with sourcing standards, open dialogue is needed on what fair remuneration

and shared value across the value chain looks like. Discussions should be inclusive of miners and major initiatives such as the GBA's CAP and EGC should devolve significant decision-making power to artisanal miners' representatives. Donor agencies, multinational companies and governments should consider supporting artisanal miners by making targeted investments in tangible areas such as geological research, groundworks, licensing ZEAs, strengthening worker-led cooperatives and access to fair and equitable finance that have clearly been identified as priorities for miners through this research.

These investments should take place in the context of policy reform and strengthened mineral governance to ensure their security and long-term success. In particular, allocating viable and sufficient mineral licences for artisanal miners under ZEAs needs to be further supported by policy reforms that give miners legal protections against eviction, more effective regulatory oversight (including clearly delineating the role of ARECOMs and ongoing monitoring and engagement with EGC as it develops its work further), access to fair and competitive financing, and ensure transparent trading and marketing facilities at/near the mine site. Ongoing work to tackle child labour needs to be met with greater investment and action to address deep seated, culturally driven gender discrimination to ensure women have the opportunity to earn a safe and secure livelihood in the mining sector. Responsible sourcing initiatives, the EGC and aid donors must *explicitly* contribute to women's empowerment and tackle discriminatory practices and gender-based violence on mine sites and in local communities.

Throughout this report we make specific policy proposals and arguments based on notions of fairness and equity. The fragmented nature of the cobalt value chain means that disparate actors across stakeholder groups (donors, private sector, government, civil society) and operating at different levels of the sector will need to coalesce around a pro-artisanal miner agenda to usher in the era of responsible artisanal cobalt.

Acronyms

AFREWATCH	African Resources Watch
ARECOMS	Autorité de régulation et de contrôle des marchés des substances minérales stratégiques / Authority for the Regulation and Control of Strategic Mineral Substances Markets
ASM	Artisanal and small-scale mining
BASIC	Bureau for Appraisal of Social Impacts for Citizen information
BGR	Bundesanstalt für Geowissenschaften und Rohstoff
CAP	Cobalt Action Partnership
CCCMC	China Chamber of Commerce of Metals, Minerals & Chemicals Importers & Exporters
DRC	Democratic Republic of Congo
EGC	Entreprise Générale du Cobalt
FAO	Food and Agriculture Organisation of the United Nations
FCA	Fair Cobalt Alliance
GBA	Global Battery Alliance
Gécamines	Générale des Carrières et des Mines
ICG	International Crisis Group
IIED	International Institute for Environment and Development
OECD	Organisation for Economic Co-operation and Development
OHADA	Organisation for the Harmonisation of Business Law in Africa
PPE	Personal Protective Equipment
ZEA	Zones d'exploitation artisanale / Artisanal Exploitation Zones

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Cobalt is an essential element within supply chains driving the technological transition to electric vehicles. A majority of the world's estimated cobalt reserves are in the Democratic Republic of Congo, with 10-30% of Congo's annual production mined artisanally. Much maligned environmental, social and human rights abuses within the artisanal sector are driving corporate efforts to “clean up” and “de-risk” supply chains. It is imperative that these efforts align with the sustainable development priorities and needs of artisanal mining communities themselves. This issue paper gathers local perspectives on the priority changes needed to improve governance and investment in the sector.

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