Governance fragmentation in the Congolese artisanal cobalt, 3T and gold sectors – an analysis of implications for international engagement and capacity development

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INTRODUCTION

For many years, the mining sector of the Democratic Republic of the Congo (DRC) has been in the spotlight of international media, civil society and policy making attention. This not only reflects the DRC's rich endowment with mineral deposits but also governance challenges pertaining to the country's artisanal and small-scale mining (ASM) sector. From 'blood coltan' in mobile phones to gold smuggling to recent concerns of artisanal cobalt mining-related child labour in battery supply chains, the challenges in the DRC have precipitated a widespread debate on the impacts of supply chain regulations and international engagement aiming for risk mitigation and promotion of responsible mineral sourcing[1, 2].

Over the past decade, a number of support projects have been implemented in the DRC's mining sector, both through industry-driven initiatives as well as donor-driven bilateral government cooperation. However, notable differences in terms of background challenges and engagement approaches are observable in the country's major artisanal subsectors. These include the cobalt (-copper) sector in the Copperbelt region, the 3T (tin, tantalum and tungsten) sector as well as the gold sector with widespread ASM activities all across the eastern DRC.

This contribution presents a brief comparative analysis of the fundamental challenges applying to the DRC's three main artisanal sectors, the regulatory and market requirements imposed on the respective mineral supply chains, as well as the international engagement and capacity development approaches implemented so far. The article's objective is to outline opportunities for transferring lessons learnt from one artisanal sector to the next while pointing out some of the gaps that currently prevent addressing certain sustainability challenges.

[1] Young SB (2015) Responsible sourcing of metals: certification approaches for conflict minerals and conflict-free metals. Int J Life Cycle Assess. DOI 10.1007/s11367-015-0932-5

[2] Mancini L, Eslava NA, Traverso M, Mathieux F (2021) Assessing impacts of responsible sourcing initiatives for cobalt: insights from a case study. Res Pol. 10.1016/j.resourpol.2021.102015

Challenges in the Congolese ASM sector

Over the last decade, industrial copper-cobalt mining activities have re-expanded alongside artisanal mining in the Copperbelt, creating tensions between industrial producers and artisanal miners working informally inside their concession areas. Child labour risks in artisanal cobalt mines have drawn a large share of international attention on the sector. Child labour in the Copperbelt is influenced by close spatial association of mining areas with nearby communities and residential areas. This proximity also results in health risks for the local population due to emissions from active mining activities[3]. Furthermore, artisanal cobalt extraction is associated with poor health and safety conditions for workers as well as other sustainability risks. Local supply chains mostly lack transparency. Artisanal and industrial mine products may be mixed in unknown proportions during local processing. In contrast to other areas in the DRC, conflict-financing risks are insignificant in the cobalt sector.

Artisanal mining of tantalum (coltan) and tin (the third '3T', tungsten, is of minor importance in the DRC) has been associated with widespread conflict financing during the Second Congo War and subsequent years, coining the term 'conflict minerals'. With the development of the Organization for Economic Cooperation and Development's (OECD) due diligence guidance for conflict-affected and high-risk areas and the concomitant enactment of the US Dodd-Frank Act in 2010, conflict financing risks in the 3T sector came under increasing scrutiny, driving the development of industry-led risk management schemes. The adoption of these schemes has led to decreasing conflict financing in the 3T sector, even though it created economic disadvantages for some stakeholders while informal trade, theft and smuggling risks continued to apply[4]. Furthermore, the majority of artisanal 3T mines continues to face widespread health and safety problems that are typical of the ASM sector. These reflect insufficient state oversight as well as capacity deficits by artisanal mine operators, combined with the necessity to extract minerals with only minimum investment. Environmental risks are somewhat less pronounced, as the processing of 3T minerals does not involve chemicals.

With more than 250,000 miners, the artisanal gold sector represents the largest ASM subsector in the DRC. Since 2010 the sector has grown due to rising gold prices, widespread poverty, lack of economic alternatives, and an influx of miners from the tighter regulated and economically less attractive 3T sector. The local trading networks are opaque and practically all artisanal gold is smuggled. In recent years, artisanal gold mining has been the major source of conflict financing in the eastern DRC. With more than 50% of all mines being militarised, there are high risks for human rights violations in gold mining areas. The gold sector is further characterised by significant occupational health and safety problems while showing higher environmental risks than the 3T sector. The latter reflects increasingly widespread and uncontrolled use of mercury for amalgamation, growing cyanide use, as well as dredging activities on local rivers. Owing to the large size of the sector and significant regional insecurity, regular mine site inspections are less frequent compared to the 3T sector. There are no significant industry initiatives engaged in the local sector, reflecting the lack of downstream industry leverage over most ASM gold supply chains. Aside from few pilot-scale traceability projects implemented by donors[5], the sector thus features an almost complete lack of effective oversight.

Effectiveness of international engagement

The international engagement with regards to the Congolese artisanal cobalt, 3T and gold sectors proceeded differently in terms of general approach and effectiveness. The relatively effective international engagement in the DRC's artisanal 3T sector reflected a combination of factors:

[3] Banza Lubaba Nkulu C, Casas L, Haufroid V et al. (2018) Sustainability of artisanal mining of cobalt in DR Congo. Nat Sustain. DOI 10.1038/s41893-018-0139-4

[4] IPIS (2019) Mapping artisanal mining areas and mineral supply chains in eastern DR Congo. International Peace Information Service. https://ipisresearch.be/wp-content/uploads/2019/04/ 1904-IOM-mapping-eastern-DRC.pdf Accessed 20 Sept 2021

[5] Neumann M, Barume B, Ducellier B et al. (2019) Traceability in artisanal gold supply chains in the Democratic Republic of the Congo. Federal Institute for Geosciences and Natural Resources. https://www.bgr.bund.de/EN/Themen/Min_ rohstoffe/CTC/Mineral-Certification-DRC/Downloads/drc_ downloads_node_en.html Accessed 20 Sept 2021

1) a beneficial international market environment for artisanal tantalum and tin from Central Africa;
2) regulatory and reputational pressure in downstream 3T supply chains;
3) availability of a due diligence reference standard established at the OECD level;
4) technical and financial feasibility of new control procedures set up along upstream supply chains;
5) international engagement and donor support to the DRC's government;
6) willingness of the Congolese government to adjust regulations and engage with national ASM sector stakeholders accordingly.

These processes facilitated largely unrestricted access of Congolese 3T minerals to international smelters. While smuggling risks still apply, donor and industry-driven activities led to noticeable progress in terms of artisanal supply chain management and transparency. At the local level, however, there are concerns that implementation of the schemes preferentially benefited larger ASM producers while leading to economic marginalisation of smaller producers.

Most of the aforementioned factors may be identified in the artisanal cobalt sector as well, but significant engagement in the cobalt sector only began in 2016. The accumulating experience with supply chain due diligence implementation in the 3T sector and the more stable environment of the Copperbelt may appear beneficial for a quicker roll-out of similar measures in the artisanal cobalt sector. However, this has not been the case so far. The cobalt sector generates higher revenues than the 3T sector and thus creates higher incentives for elite capturing and associated political capital in the DRC. Cohabitation questions between artisanal and industrial cobalt (-copper) mining stakeholders are more pronounced. To date, the DRC government has not yet defined a clear strategy endorsing both forms of extraction with their respective benefits for local livelihood support and fiscal revenue generation. Most ASM activities take place illegally on industrial concessions while geologically attractive artisanal mining areas are not sufficiently available. A lack of legal artisanal cobalt mine sites prevents international initiatives from engaging in the first place.

The DRC's artisanal gold sector complies with only few of the factors that are driving the adoption of due diligence and transparency measures in the 3T and cobalt sector. Artisanal gold mining continues to provide substantial revenues in the DRC, with ineligible parties being involved in illegal profit capturing. Downstream gold supply chain engagement in the DRC has been weak to non-existent over the past decade, reflecting a lack of regulatory requirements in the Asia-dominated consumer markets for most Congolese ASM gold. The technical feasibility of introducing gold traceability procedures in the DRC has been demonstrated at a pilot scale but the financial feasibility as well as the local acceptance for adopting such measures at a large-scale is doubtful. The latter reflects the complex business networks established in the local gold trade and associated pre-financing arrangements. As a result of these complexities, most donor interventions focus on the easier to handle mine level, if they engage in the gold sector at all.

Implications for capacity development

While current ASM sector governance in the DRC shows signs of partial fragmentation and certain sustainability risks mainly apply to specific subsectors, many challenges – from formalisation to health and safety to transparency in local trade – equally apply to all sectors. As such, consolidating and harmonising capacity development approaches among the different sectors might improve the effectiveness of regulatory oversight and international engagement. Capacity development transcends the supply chain-focused interests of downstream industries that have driven changes in the DRC in recent years. Therefore, the Congolese government may consider exchanging with other governments on general ASM sector policy development.

Over the past decade, multi-stakeholder committees have contributed to evaluating supply chain incidents, particularly in the 3T sector, while also discussing mining revenue distribution for local

economic development[6]. A stronger institutionalisation of such committees, involving them in industry and donor approaches while increasing transparency and inclusivity of their decision-making processes may be a useful step towards harmonising ASM sector governance across all commodities. Mine life cycle thinking is critical as well: planning for closure and rehabilitation requires sufficient funds that should already be set aside while the site is still in active production. Finally, ASM sector formalisation requires engagement at the mining, trading and financing levels. Viable ASM operations require access to finance or investment based on suitable collaterals such as legal title, business plans or geological resources.

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2016 to 2022 employed at BGR in international corporation project in DR Congo working on sustainability and due diligence issues in DRC's mining sector

[6] Wakenge CI (2019) 'Basket fund' and public authority in South-Kivu, eastern Democratic Republic of the Congo. LSE Research Online. http://eprints.lse.ac.uk/103252/1/basket_ fund_public_authority_south_kivu.pdf Accessed 20 Sept 2021