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IMPACT OF COVID-19 ON ARTISANAL AND SMALL- SCALE MINING IN THE DEMOCRATIC REPUBLIC OF CONGO



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EXECUTIVE SUMMARY

This report explores the impact of COVID-19 on artisanal and small-scale mining (ASM) of cobalt and copper in the Copperbelt region of the Democratic Republic of Congo (DRC). It examines the role of the global market and international actors on the supply chain of these minerals and how the pandemic has altered processes for the mining, purchasing, and selling of cobalt and copper. Our team paid special attention to the role of Chinese and American corporations involved in the cobalt and copper sector as well as local actors, NGOs, and governments. A central concern was the pandemic's impact on local miners' livelihoods, labor exploitation, and child labor. The data collected highlights current and potential repercussions of the pandemic on socio-economic and political developments in the mineral supply chain that have a bearing on child labor. The report concludes with a series of recommendations to help ameliorate the scourge of child labor and exploitive labor, with

with an emphasis on enhancing opportunities in the mining sector through carefully targeted programming. In this regard, we hope that these findings will enhance the positive impact of private sector, government, and civil society organizations.

The study was undertaken in response to a statement of work (SOW) issued by the US Department of Labor, Bureau



of International Labor Affairs (ILAB), Office of Child Labor, Forced Labor, and Human Trafficking. It was conducted under the academic supervision of Professor Hrach Gregorian, School of International Service, American University. Data gathering and analysis was performed during a four-month period beginning in late August 2020. The methodology consisted of desk-research, interviews, and qualitative coding. A total of 43 subject matter experts (SMEs) were interviewed including scholars, NGO staff, and government and private sector representatives.

Our research has led us to make the following observations. First, the DRC has not seen widespread proliferation of the coronavirus, as was originally feared. The pandemic mostly exacerbated numerous challenges already confronting mining communities in the Copperbelt region. The copper and cobalt sector's dependency on international markets creates a fragile economic environment for these communities. When the pandemic began, and international borders closed, the global price of cobalt fell dramatically, threatening the livelihoods of miners. Many cobalt miners shifted to mining copper as the price of that mineral remained more stable. However, miners still experienced food insecurity, unemployment, and an overall disruption of their lives. It should be noted that this is not an unusual phenomenon as volatility in the international markets historically has impacted miners' economic status. Additionally, it appears an uptick in child labor during this period resulted more from school closures than neglect or exploitation.

Data analysis produced the following recommendations: More research needs to be conducted on the impact of the COVID-19 pandemic on local communities, with increased emphasis on continued monitoring and evaluation; Greater financial investment should be made in local community groups, programs aimed at decreasing child mining, and health and education programs that respond to COVID-19; As the pandemic continues, there must be a renewed commitment to and investment in auditing for due diligence. Lastly, to decrease the community's reliance on the mineral sector, there must be higher investment in initiatives aimed at diversifying sources of income for members of the mining community. This will ultimately help reduce the shock of global disruptions on local communities in the Copperbelt.

KEY FINDINGS

1. COVID-19 has contributed to a subtle, indirect upstream impact on the cobalt and copper mining industries, especially with respect to child labor. However, the challenges confronting mining communities in the Copperbelt region pre-dated the pandemic and were for the most part exacerbated by it.
2. The overall impact of COVID-19 on child labor and conflict was minor. The virus affected some aspects of the problem but did not significantly alter its character.
3. The current price of cobalt is volatile and trending downward. The price of copper (and gold has been increasing and appears more stable. Consequently, miners have shifted from cobalt to copper mining.
4. The supply chain has experienced local regulatory changes restricting the sale of cobalt ore to specific locations in the Kolwezi region, limiting access to the supply chain and therefore income.
5. Shifts are also observed in large-scale cobalt production because of government or company regulations, and COVID-19 related travel, and supply chain restrictions.
6. The focal point of response strategies to COVID-19 should be food security, currency stabilization, income help, and formalization of the ASM mining sector.
7. There are a variety of definitions of child labor and conflict, leading to confusion about which elements of ASM need immediate attention. Therefore, it is imperative to develop a cohesive framework for definitions regarding matters relating to ASM, specifically in the cobalt-copper sector.

INTRODUCTION

THIS SECTION INCLUDES THE SCOPE OF WORK, THE BRIEF OVERVIEW OF THE METHODOLOGY AND, PURPOSE OF THE REPORT

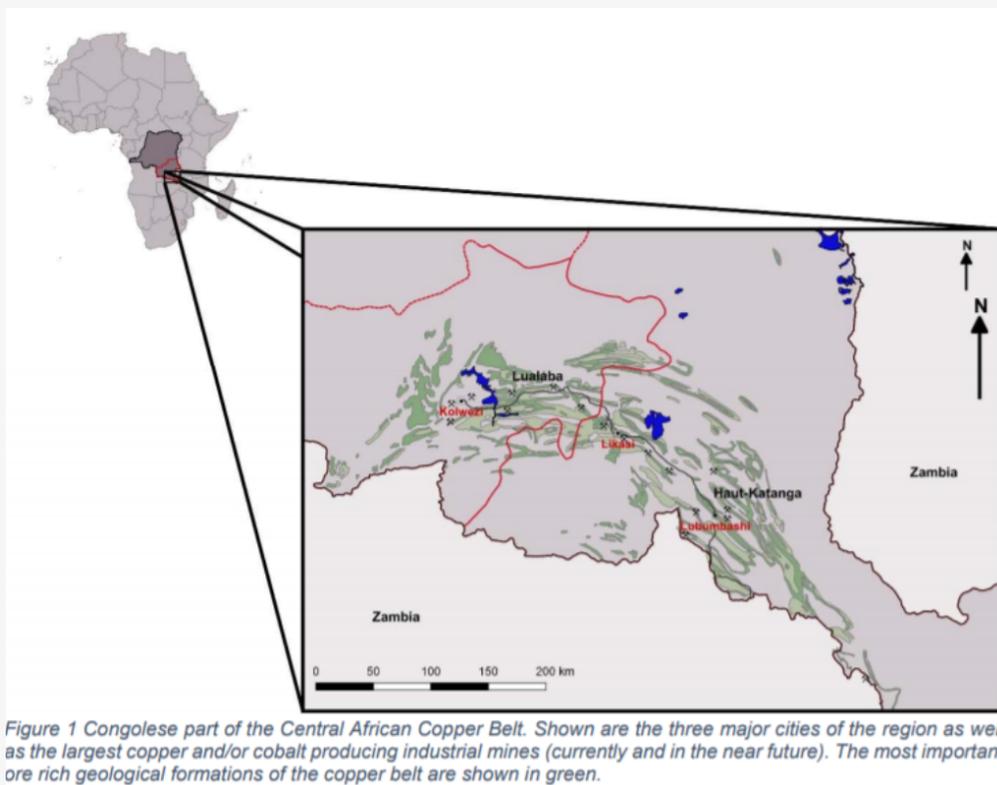


The Democratic Republic of Congo (DRC) recorded its first case of COVID-19 on March 10, 2020, leading to a four-week shutdown of travel, schools, bars, and restaurants (1). While the bulk of cases originated from the capital city of Kinshasa, the southern and eastern regions of the country were also affected(2). Additionally, COVID-19 created

"CHARGES OF EXPLOITATIVE LABOR PRACTICES, INCLUDING CHILD LABOR, IN THESE MINES IS COMMON, WITH MANY NGOS, INTERNATIONAL ORGANIZATIONS, AND STATE ACTORS WORKING TO BETTER CONDITIONS AND INCREASE PROTECTION FOR LABORERS."

a barrier to international trade of DRC minerals, as many buyers, transporters, and sellers suspended operations (3). In short order, the international community grew concerned about the Copperbelt region of the DRC, even though the virus was not spreading rapidly outside of Kinshasa. The region's economy is dependent on the mining of cobalt and copper.

Charges of exploitative labor practices, including child labor, in these mines is common, with many NGOs, international organizations, and state actors working to better conditions and increase protection for laborers. After the minerals are mined, they are purchased by international buyers and used in many technologies from cell phones to car batteries. With the closure of international borders and the manufacturing plants that incorporate these minerals into products, the pandemic threatened the Copperbelt's already shaky economic status.



This report seeks to outline the implications of the COVID-19 pandemic on ASM in the Copperbelt region. Additionally, the study strives to shed additional light on the systems of mining, transport, and labor that existed in the Copperbelt region before the onset of the pandemic. Through collecting this baseline information we are better

able to understand how the global pandemic impacted the local mining communities in the DRC. The report aims to outline the unexpected consequences of the pandemic on copper and cobalt mining while exploring windows of opportunities that it has presented.

The report relies on data collected from primary and secondary sources. Desk-top research was conducted followed by interviews with subject matter experts (SMEs) whose responses were subjected to qualitative coding to discover trends. Trend analysis was then used to amalgamate findings and generate conclusions and recommendations.

The report begins with an overview of our scope of work as well as research methods. It then provides background on ASM in the DRC as it pertains to the history of mineral exploitation in the country, the role of cobalt and copper in the global market, and the impact of the cobalt and copper mining industry in the Copperbelt. Next, the report presents a number of key findings on the role of international actors, supply chains, exploitive and child labor, and mitigating factors. Lastly, the report concludes with recommendations for governments, international organizations, NGOs, and corporations for potential approaches to improve labor practices in cobalt and copper mines and to mitigate the effects of COVID-19.

SCOPE OF WORK

This project was developed in collaboration with the Department of Labor, the Bureau of International Labor Affairs (ILAB), and the Office of Child Labor, Forced Labor, and Human Trafficking and the six Master's students completing their practicum project at the School of International Service at American University. The work plan for the project was developed in collaboration with the Department of Labor Bureau of International Labor Affairs (ILAB) Office of Child Labor, Forced Labor, and Human Trafficking. The research was conducted by six graduate students in fulfillment of the MA capstone requirement in the School of International Service at American University. The work plan for the project was drafted and finalized in a document titled "American University Work Plan for Department of Labor," (Appendix A). The work plan and scope of work agreed upon by all parties included a research methodology, schedule of activities, and methods of communication.

The research objectives were as follows:

"A focused research report on how COVID-19 impacts the supply chains of ASM mines and minerals in the Copperbelt region of the DRC and the consequences on labor. The report will include proposed strategies to mitigate, overcome, or take advantage of any opportunities that have arisen due to COVID-19 to better labor standards (and reduce conflict)."

To appropriately address the research objectives, the client and researchers focused on three primary sub-objectives. Regionally, the project centers on cobalt and copper mining and supply chains in the Copperbelt region of the DRC. Topically, the project explores human rights and labor issues such as child labor within the areas of supply chain oversight and compliance mechanisms. Phenomenologically, the research focuses on the consequences of the COVID-19 pandemic on cobalt and copper mining in relation to exploitative labor, health, and human rights. The researchers sought to identify how the pandemic has impacted ASM in the region and how the negative effects of the pandemic can be mitigated.

SCHEDULE OF ACTIVITIES

TIME FRAME	OBJECTIVE
MONTH 1 MID-AUGUST-MID-SEPTEMBER	LITERATURE REVIEWS AND GAP ANALYSIS - RELATIVE TO THE DRC AND ASM MINING.
MONTH 2 MID-SEPTEMBER-LATE OCTOBER	RESEARCH ON ASM SUPPLY CHAINS, INCLUDING INTERVIEWS, NGOS, CSOS, GOVERNMENTS, PRIVATE COMPANIES AND RESPONSIBLE INITIATIVES.
MONTH 3 LATE-OCTOBER-LATE NOVEMBER	SYNTHESIZE ANALYSIS; CREATE PRESENTATIONS (PPT/ORAL AND WRITTEN).
MONTH 4 LATE NOVEMBER-MID-DECEMBER	FINALIZED PRESENTATION AND REPORT VIA EDITS AND APPROVALS. VIRTUAL PRESENTATION OF RESEARCH FINDINGS AND CONCLUSIONS AT US DEPARTMENT OF LABOR.



BACKGROUND ON ASM IN THE DRC

THIS SECTION INCLUDES HISTORY OF EXPLOITATION OF RESOURCES, COPPER AND COBALT IN THE GLOBAL MARKET, AND IMPACTS OF COPPER AND COBALT MINING IN THE DRC

HISTORY OF EXPLOITATION OF RESOURCES

The exploitation of the DRC's resources began at colonization. Historically, and in the contemporary era, exploitation of minerals and other resources have contributed to human rights abuses. The DRC has been systematically exploited by a few at the expense of the vast majority. Political elites today repeat a familiar pattern of applying brutal force to plunder precious resources.

Due to exploitative practices in the mining industry, ordinary Congolese long ago established an "informal economy" to survive. This includes income derived from artisanal, and small scale mines and child miners (4).

The exploitation of natural resources has been characterized for decades by such practices as the smuggling of cobalt and copper out of the DRC. There are informal trade

networks for the exchange and export of cobalt and copper which, among other practices, include routine bribery of local officials. Political elites earn millions of dollars through the exploitation of the state's mineral resources (4). Local strongmen are brought into government officials' networks through commercial channels to get natural resources contracts.

The exploitation of minerals and labor abuses increased during the Covid-19 pandemic due to the lucrative and easy-access channels in which illegal activity could ensue. Furthermore, the lack of a formal financial structure within ASM mineral trade has normally positioned local miners to accept significantly lower prices for their mineral production and the mineral value. Such undervaluation was exacerbated by the Covid pandemic. Moreover, some copper and cobalt mining workers were required to work beyond the regulatory maximum eight-hour shift without additional compensation (5).

COPPER AND COBALT IN THE GLOBAL MARKET

The copper and cobalt that is sourced in the DRC is critical to modern economies. Copper is used to make a variety of everyday objects from jewelry to smartphones to wiring and piping (6). The price of copper averages about \$3 USD per pound, or \$6,000 USD per metric ton (7). The scale of demand for copper can be demonstrated using the Apple iPhone as an example. Copper comprises 5% of an iPhone's total mass. In 2019 alone, Apple sold over 40.8 million iPhones, which contained a total of 1,090,890 pounds of copper (8). The DRC is a primary source of copper, producing 1,041,445 tons in 2019 (9).

Similarly, cobalt is an essential material in smartphones, laptops, and rechargeable batteries. The average price of cobalt ranges from \$14-16 USD per pound or \$38,750 to \$45,000 per ton (10). Utilizing the iPhone example again, cobalt comprises 5% of an

iPhone's mass. With 40.8 million iPhones sold in 2019, this amounts to 1,219,410 pounds of cobalt in iPhones alone. In 2019, the DRC produced 100,000 metric tons of cobalt (11).

IMPACTS OF COPPER AND COBALT MINING IN THE DRC

Cobalt and copper are critically important minerals for the DRC, as nearly 20% of the country's GDP is supported by their export (12). Virtually all copper and cobalt revenue (constituting over 80 per cent of DRC exports) comes from the provinces of the Katanga region, which is located within the Copperbelt. Currently, the DRC classifies itself as the dominant cobalt and copper producer in Africa and sits on nearly 60% of the world's cobalt reserves (13). Demand for Cobalt has rapidly increased in mineral markets because it is a key component of all types of rechargeable batteries. High global demand and rising cobalt prices triggered a supply deficit between 2015 and 2018, so the DRC rapidly increased cobalt production. The Congolese government intensified new projects, and cobalt production was maximized. It classified cobalt as a strategic raw material and increased royalties from 3.5% to 10% in 2018, almost tripling the previous levy (15). As global demand for copper and cobalt increased, artisanal and small-scale mining experienced a substantial increase in activity. The disparity between the Copperbelt's mineral wealth and the poverty of its citizens is jarring. The informality and illegality in the copper-cobalt sector represent significant obstacles to establishing effective domestic and international support intervention. Moreover, due to Covid-19, challenges in cobalt and copper production, export and trade have increased.

METHODOLOGY

This section details the data collection and methodology used in this study. First, researchers conducted desk-top research to gain a broad understanding of the cobalt-copper mining industry in the DRC. Following this, researchers collected qualitative data through interviews of SMEs on topic. The interviews were transcribed, coded, and incorporated into the findings section of the report. Research limitations were also discussed.

SECONDARY RESEARCH

The initial stage consisted of desktop research to understand the landscape of cobalt and copper mining prior to the onset of the COVID-19 pandemic. The researchers aimed to map out the structure of the supply chains in addition to the prevalence of exploitive and child labor. The researchers also explored the role of international actors, non-governmental organizations, and corporations.

The ILAB at the US Department of Labor provided the researchers with a list of relevant reports (see sources). After examining the pre-COVID landscape of cobalt and copper mining in the DRC, the researchers analyzed the potential impacts of the pandemic on the industry. Specifically, the research focused on the pandemic's impacts on supply chains, child labor, and other forms of exploitive labor. Following the literature review and



tabletop research, the researchers developed a unique and creative approach to data analysis. Overall, the limited secondary source data on the impacts of COVID-19 on ASM mining in the Copperbelt highlighted the need for primary data collection.

PRIMARY RESEARCH

The researchers developed a qualitative research method to analyze the consequences of COVID-19 on ASM in the Copperbelt. Qualitative data was collected through 43 interviews with SMEs on ASM mining in the DRC. The ILAB provided the initial population sample for the interviews. The SMEs' work engages with topics including child labor, exploitive labor, labor rights, human rights, mining, and supply chains. Snowball sampling was used to find more SMEs to interview. Snowballing was accomplished by asking each interviewee to provide additional contacts with expertise in this field.

Interviews were conducted in a semi-structured style over the phone and Zoom. All interviews were recorded through Zoom or a smartphone recording app., with the consent of the interviewee. The researchers started by developing a foundational set of interview questions [Appendix B]. Additional questions were added to each interview based on the SME's expertise. The semi-structured interview style provided the researchers with flexibility and produced rich data from diverse perspectives.

QUALITATIVE RESEARCH CODING

Following the interviews, a mix of inductive content analysis and inductive framework analysis was employed to evaluate the data. Initially, the researchers read through interview transcripts with no knowledge as to content. The researchers then assigned codes to

Interviews

Transcription

Coding

Iterative
Comparison

Deductive Codes

- COVID
- Child Labor
- Human Rights
- Supply Chain
- Mining Company
- China

Inductive Codes

- Risk
- Unintended Consequences
- Problem/Challenge
- Cobalt
- Action
- Recommendation
- Gender

to the themes that stood out in the transcripts. It is critical to note that some codes were established prior to the process. Any jargon or catch phrases relative to the researchers' statement were pre-imposed as codes in the qualitative methodology. These codes include "COVID-19," "Child Labor," and "Supply Chains."

As the researchers moved from the first to the second and third transcripts, they identified a need to adjust the hierarchy of codes to better fit the overarching themes emerging from the transcripts. For this reason, as more transcripts were coded, the codebook became more cohesive and comprehensive.

LIMITATIONS

While the data collection and coding provided rich insight into the impacts of COVID-19 on ASM in the Copperbelt, the project had limitations. Due to the time constraints associated with the project, the researchers were unable to create a fully developed interview question set for the interviewees at the start of the data collection process. Instead, as the statement of work narrowed and the research team gained a more holistic view of the topics, the questions included more references to situations or current events of relevance to the project. While this may have reduced the reliability of some of the data, there is no reason to believe it negatively impacted the validity of the findings.

The research team did not include a French speaker. As French is one of the primary languages in the DRC, interviewing Congolese experts working on the ground was extremely challenging. This restricted the population of would be sources the research team could interview.

FINDINGS



A. ASM HUMAN RIGHTS VIOLATIONS IN COPPER-COBALT MINING

B. CHILD LABOR IN THE ARTISANAL COPPER-COBALT MINING

C. IMPACTS OF COVID-19 ON COBALT AND COPPER MINING

D. CONSEQUENCES OF COVID-19

E. SUPPLY CHAINS

ASM HUMAN RIGHTS VIOLATIONS IN COPPER-COBALT MINING

Human rights violations in the ASM sector are a persistent concern for many stakeholders, including government officials, in the DRC. Human rights violations have centered on gender dynamics and child labor violations. The artisanal mining sector is frequently investigated for violations because its informal and labor-intensive structure allows for illegal mineral extraction and, therefore, opportunity for exploitation and infringement of rights. The lack of accountability has raised major concerns from human rights organizations who have flagged abuses, putting pressure on multinational corporations that buy Congolese minerals (15). The pressure leads international companies that are in industries like automotive and electronics to seek alternative strategies to source their cobalt responsibly. The vagueness of human rights protocols has led to a call for common, formalized standards for responsible ASM cobalt mining with explicit human rights standards (15). Another major concern is the presence of Congolese government armed forces on mined sites. This makes sites' more vulnerable to exploitation by rogue armed forces. Armed groups further perpetuate and exploit human rights violations that could be mitigated by proper formalization tactics (16).

Such concerns notwithstanding, there has been progress in mandating human rights standards, particularly in affecting supply chain due diligence. The European Commission, in its Sustainable Corporate Governance Framework, is striving to create a legislative proposal on mandatory human rights and environmental supply chains due diligences by the first half of 2021 (17). This is one of the first legal tools structured and hopefully enforced across value chains. The Framework complements the European Commission's work implementing corporate due diligence, and it enshrines the UN Guiding Principles on Business and Human Rights (UNGPs) as legislation. Furthermore, a 2019 study completed by IPIS and Ulula

analyzed the impact of due diligence, and it enshrines the UN Guiding Principles on Business and Human Rights (UNGPs) as legislation. Furthermore, a 2019 study completed by IPIS and Ulula analyzed the impact of due diligence programs in the eastern DRC. As was noted in the study, "...while there is a correlation between due diligence programs and better mining outcomes, this doesn't necessarily translate into better human rights and development outcomes (17)." A final recommendation of the study is that moving forward, due diligence, especially relating to human rights, needs to be more inclusive of local opinion and adaptation, which can be monitored and administered through both voluntary and mandatory measures (17).

1. SAFETY

The findings indicate that human rights violations in the copper-cobalt mining sector in the Copperbelt region of the DRC center on workers' rights and associated safety measures. Mine safety precautions were listed as the utmost important human right in "Digging for Change" by The Impact Facility (18). By improving structural hazards, and health and safety, the miners' rights can be protected (18). Human rights violations occur when safety is not prioritized, which in turn leads to injuries and fatalities. Not only do human rights violations lead to short-term tragedies, they result in long term "destabilization and financial challenges for families relying on ASM and further contribute to the risk of occurrences of child labor in the surrounding communities (18)." Therefore, as the report notes, the focus of all relevant actors and stakeholders should be on improving working conditions at ASM sites. Addressing mine safety and security issues requires a restructuring that begins with reviewing and potentially improving practices in the entire system. The report states, "downstream cobalt users have a moral obligation to engage with upstream

producers where the situation is most dire; until diggers are reasonably safe, any efforts to address development issues in the mining communities might be disregarded as ‘greenwashing (18).”

CHILD LABOR IN THE ARTISANAL COPPER-COBALT MINING

The findings of child labor in artisanal copper-cobalt mining in the Copperbelt region of the DRC are profound. It is crucial to note that child labor occurs within the supply chain of these minerals, but is also frequently observed in non-commercial environments such as households, including activities such as cooking, nursing, or collecting and transporting water by hand. According to a study by the Center for Effective Global Action (CEGA) of the University of California, Berkeley, “the incidents of children working at mines alone, therefore, is not an indicator that can be used to reliably measure the scale of child labor in mining communities in the region (18)”

Numerous publications have noted interviews and conversations with local families, particularly the mothers, seeking alternatives to child labor. Many mothers noted their children contribute to mine activity as washers. Mothers and other community representatives confirmed that “child labor among children below the age of 15 occurs to a large extent to ease the pressure on low household incomes (18).” The mothers and community representatives articulated that school fees and school uniforms represent some of their families’ greatest financial burdens. In turn, children miss days or weeks of school so they can work to relieve the pressure created by fee requirements (18). The Digging for Change Report by the Impact Facility also cites a lack of after-school activities as another reason children work at the mines, stating:

WITH SCHOOL BEING LIMITED TO JUST A FEW HOURS OF CLASSES PER DAY, ANOTHER REASON WHY YOUNG CHILDREN MIGHT END UP 'WORKING' AT MINE SITES, IS THE LACK OF AFTER-SCHOOL ACTIVITIES, OFTEN LEADING TO CHILDREN ACCOMPANYING OLDER HOUSEHOLD MEMBERS TO THEIR WORK. OFFERING ADEQUATE AFTER-SCHOOL CARE PROGRAMMES MITIGATES THE NEED TO OVERSEE CHILDREN BY TAKING THEM TO WORK (18)

Child labor may be exacerbated by the ownership and administration structures of the schools, as nearly half of local schools are privately run. The privatization of schools burdens families with having to pay teachers' salaries, despite the government's 2019 commitment to deliver free primary education through its public school system (18). There seems to be a systemic dependency on private education, which naturally leads to financial hardships, especially in more remote areas. The inability of families to pay for quality education combined with the challenge of recruiting teachers to teach in remote areas has led to the hiring of unqualified staff.³² Rather than creating sustainable funding streams for teacher salaries, funds and grants are generally directed towards school infrastructure and building materials.

Another substantial finding regarding child labor is the willingness, indeed eagerness, of legally-aged miners to work in the mines. Numerous reports and child labor experts observe that children aged 15 and above are choosing to work at mine sites to establish their social status, to gain personal opportunity, and to establish independence from their families.

An awareness-raising campaign coupled with vocational training could be one way to engage at-risk youth (18)." These strategies would also provide support and sustainability for working children. Because the mines represent agency and

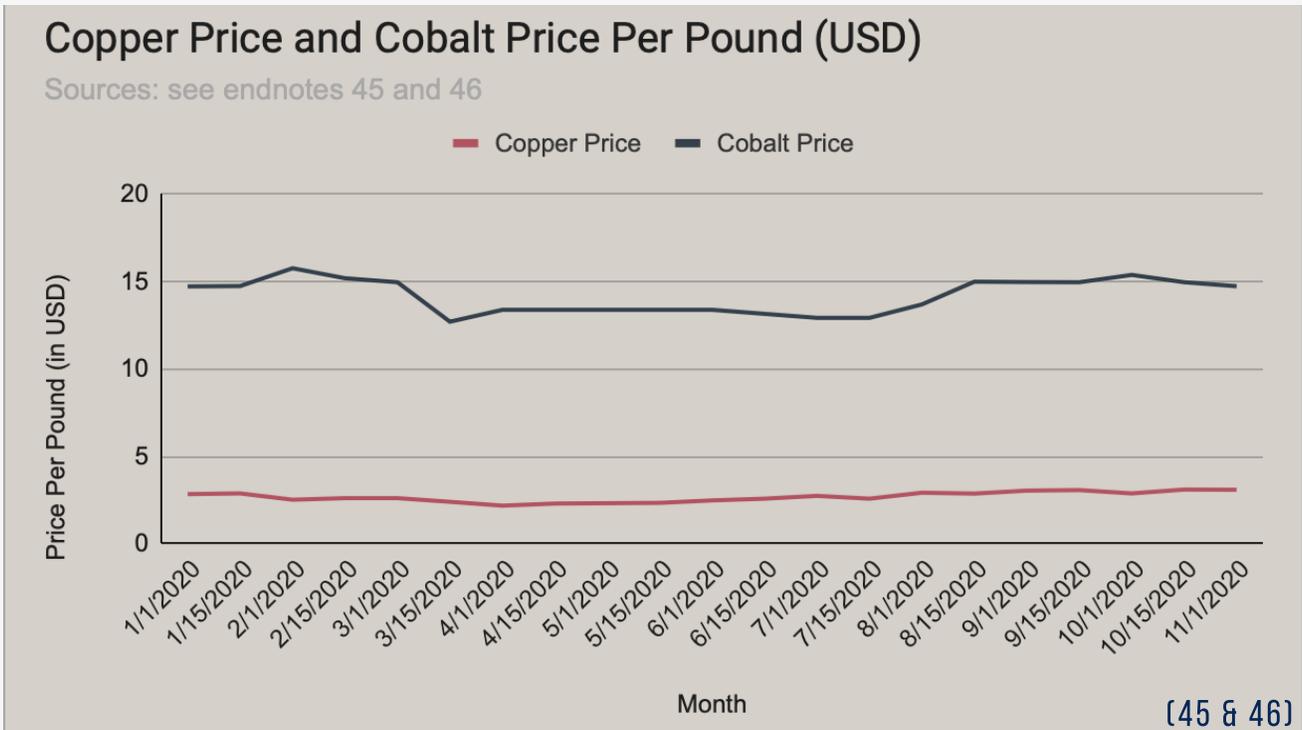
independence for older children experts call for greater understanding and appreciation of the local context. Part of understanding the local context is having a clear and shared definition for child labor.

One such awareness-raising effort is a multi-stakeholder initiative to address child labor in DRC mining communities created through a collaboration between the UN Children’s Fund (UNICEF) and the Global Battery Alliance (GBA). The program, The Fund for the Prevention of Child Labour in Mining Communities - A Global Battery Alliance Collaboration, is striving to raise US\$21 million from various public and private partners, focusing in Lualaba and Haut-Katanga provinces (19). The various initiatives will be coordinated and implemented in collaboration with local and civil society organizations and the government in the DRC. The program is coupled with other initiatives from the various participants, including the DRC’s national development priorities and the Sustainable Development Goals (SDGs) created by the United Nations. The overarching purpose of the fund is:

...TO STRENGTHEN LOCAL SOCIAL SERVICES, INCLUDING EDUCATION, HEALTHCARE, AND BIRTH REGISTRATION. IT WILL ALSO STRENGTHEN SOCIAL WORKERS’ CAPACITIES TO PREVENT, IDENTIFY AND RESPOND TO CHILDREN WHO ARE NEGATIVELY AFFECTED BY MINING OPERATIONS, AND WILL SUPPORT BETTER SOCIAL PROTECTION SYSTEMS IN MINING COMMUNITIES (19).

IMPACTS OF COVID-19 ON COBALT AND COPPER MINING

1. GLOBAL MARKETS AND TRADE IMPACTING PRICES:



COVID-19 made a notable impact on the price of copper and cobalt. While the graph above does not indicate an extreme change in cobalt or copper prices, a dollar or so fluctuation can have a detrimental impact on the supply chain as a whole. The chart indicates that the price of cobalt dropped significantly in March when borders closed. Copper, on the other hand, has seen less significant changes in price. Companies have therefore shifted away from cobalt to copper mining.

It is noted in the reports and interviews conducted for this study that COVID-19 has had more of an impact on global markets and trading than on local communities in the Copperbelt. Jose Diemel, a Program Director for the

Fair Cobalt Alliance at The Impact Facility, noted in an interview that within the Copperbelt, miners are moving from cobalt to copper because of cobalt's decreased market price. Diemel noted that other factors, like international scrutiny, could have more of an impact on miners' livelihoods than COVID-19. A dearth of actors in the supply chain has decreased the cobalt price and has led to fewer opportunities for employment.

The main concern regarding the impact of COVID-19 on the copper and cobalt supply chains in the eastern DRC is the impact on the global and trade markets, which in turn has affected mineral prices. Stephanie Shumsky from Pact World states in an email exchange:

IN GENERAL, THE PRICE OF COBALT HAS BEEN VOLATILE AND TRENDING DOWNWARDS, WHILE THE PRICE OF COPPER HAS BEEN INCREASING AND SOMEWHAT MORE STABLE. THESE PRICE PRESSURES COMBINED WITH LOCAL REGULATORY CHANGES RESTRICTING THE SALE OF COBALT ORE TO ONE SPECIFIC LOCATION HAVE PUSHED ASM WORKERS AWAY FROM COBALT AND TOWARDS MINING OPERATIONS FOCUSED ON COPPER AND GOLD IN THE KOLWEZI REGION. LARGE SCALE COBALT PRODUCTION HAS ALSO BEEN VARIABLE OVER THE PANDEMIC PERIOD, AS TRAVEL, SUPPLY CHAIN AND WORKPLACE RESTRICTIONS NEGATIVELY IMPACTED PRODUCTION FOR INDUSTRIAL MINES IN THE REGION (20).

A report completed by the Association for the Development of Peasant Initiatives noted COVID-19 has changed the economy, price of food, the exchange rate, and has further pushed people into extreme poverty (21). Due to the global reliance on the artisanal mining sector, COVID-19's impact on locals participating in these supply chains has been severe. Furthermore, the challenge of tracking the movement of cobalt in the ASM market is strenuous and confusing due to the need for intermediaries to sell the minerals. Even prior to COVID-19, it was difficult to track its movement among points of contact. Now, though, as demand decreases, there are fewer available intermediators. Consequently, the volume of transactions is also decreasing, which in turn lowers the price of cobalt. This price depression further exacerbates the potential for a significant disconnect between local and international markets. For example, there is a 30-40% difference between local and global gold sector markets. We can only speculate that this is similar in the cobalt industry (22). This speculation is further supported by a recent IMPACT report noting that there "is reportedly a lack of liquidity among local gold buyers, forcing miners to take significant cuts on the spot price of their gold—as much as 30-40%, depending on location (23)."

Again, these statistics are on gold so at this time we can only infer a similar dynamic within the copper-cobalt sectors.

2. TRADE

Because of COVID-19, copper-cobalt-related demand, and therefore, trade has slowed. This slowdown of trade led to a drying up of pre-financing and investments, which in turn caused prices to decrease. It is important to note the stark impact of global trade on a local level, as it negatively impacts mineral production. According to a survey completed in early May 2020 by the Responsible Minerals Initiative, at select sites and within minerals like gold, they have observed a serious decrease in numbers of miners due to COVID-19. The median number of miners per site decreased from 200 at the time of the baseline, to 109 (24). In this particular report, the pressure and strain from the change in the global trade left many mine workers no option but to disengage with the artisanal mining sector and either return home or move to agricultural activities in the area (24).

3. CHILD LABOR DURING COVID-19 IN THESE MINING SUPPLY CHAINS

During the data collection process, extracting more in-depth and local information regarding child labor during COVID-19 was extremely difficult. This was due to limited personnel and data collection initiatives at the time of the project. Therefore, the findings gathered on child labor during COVID-19 has been limited to questionnaires and interviews with either local affiliates or workers.

A necessary pretext regarding child labor in the copper-cobalt supply chains is that the concern was well-established prior to COVID-19. Therefore, there is little to potentially no correlation between the prevalence of COVID-19 issues and child labor. Child labor is a systemic concern, intensity fluctuates with regular and frequent changes in economic or social pressures. However, there is a broad understanding that child labor is culturally accepted in these mining communities; it is the norm and perception that

children should and can be a broad understanding that child labor is culturally accepted in these mining communities; it is the norm and perception that children should and can be in the mines if needed or wanted. This is why organizations like PACT strive to change such cultural norms around child labour, through child-centered and rights-based approach (which includes activities such as positive parenting, sensitization of communities, set-up of neighbourhood committees etc.)(25)

The Civic Strengthening Project Manager from the Good Shepherd provided in-depth commentary on the matter. Through email correspondence, when asked about the child labor oversight affected by COVID-19, the respondent stated:

“THE PROBLEM OF THE PRESENCE OF CHILDREN IN THE SUPPLY CHAIN FOR COPPER AND COBALT ORES DURING THIS PERIOD OF THE CORONAVIRUS PANDEMIC CONSTITUTES A HUGE RISK, ESPECIALLY AS WE OBSERVE THE LAPSES OF PROTECTIVE MEASURES AGAINST COVID- 19 IN ALL CONTROLLED AND NON-CONTROLLED ARTISANAL MINES AND QUARRIES. MOREOVER, DIGGERS BELIEVE THAT THE PANDEMIC DOES NOT EXIST HERE IN CONGO AND THAT IT IS THE POLITICIANS WHO ARE MAKING THE SITUATION TO APPEAR WORSE FOR FINANCIAL GAIN FROM WILLING DONORS TOWARDS COMBATING THE VIRUS (26).

Good Shepherd’s Civic Strengthening Project Manager further affirmed that child labor is abundant because the children are used for cheap labor to load the ores on motorcycles. The Good Shepherd Project Manager observed that normally the local people and children use motorcycles to transport their minerals to the buying centers established by the middle men in the supply chain (26) Children can be exploited by the military on site. Military personnel, who are well-armed and deployed in the mines for mining company security, collect money from the local people who scavenge minerals left behind by the mining companies as gate pass. This involves the children when they ask for an amount not less than 3000fc (1.5USD) per motorcycle, highlighting clear exploitation child exploitation at the mine

sites, including sexual exploitation. Girls and vulnerable women are seen in other labor capacities, exposing themselves to health and safety concerns. The Civic Strengthening Project Manager explained that “girls under 18 walk around the site to sell cassava and peanut chips while others are cleaning and packing minerals and others still setting themselves at strategic places for prostitution (26).” In addition to child and unsafe labor practices there are other observed labor-related concerns including informal and forced labor. The Good Shepherd Manager noted that sitework in the wells is completed by diggers accompanied by children, adolescents and women. As the diggers are not provided with personal protective equipment and the wells are not fully secured, no work organization can defend a clean and safe supply chain. The women and children accompanying the diggers are at grave risk.

The lack of protective measures has also been observed during the COVID-19 pandemic, and is compounding the risk not only to those working at the site, but to the miners’ communities as well. There are no protocols in place at these ASM cobalt mining sites. With the digger population in the ASM cobalt mines numbering more than 10,000, there is a high risk of spreading the virus (26).

4. INTERNATIONAL ACTORS ROLE/INVOLVEMENT DURING COVID-19:

Findings show numerous actors involved in the supply chain, including private sector actors, different branches of government, and NGOs. In the early stages of COVID, actors tried to support the AMS sector by providing materials, education and training to the local miners and communities. But locals on the ground are currently observing little to no management of the pandemic anymore. The Civic Strengthening Project Manager reports that:

THE PROVINCIAL HEALTH MINISTRY, WHICH IS MANAGING THIS CRISIS, HAS STOPPED RAISING AWARENESS AND PROVIDING WATER IN VARIOUS HAND WASHING KITS IN PUBLIC PLACES. THERE IS TOTAL ABANDONMENT IN THE MANAGEMENT OF THIS CRISIS, WHICH IS WHAT INFLUENCES THE LAPSES OF PROTECTIVE MEASURES AGAINST THE CORONAVIRUS PANDEMIC (26).

Despite this negligence, there is evidence of improved collaboration between companies, international actors, the Congolese government and the miners. A successful collaboration could lead to disbursements for improvements in COVID-19 public education understanding health measures and protocol to limit exposure. An example is,

COMMODITIES TRADER TRAFIGURA HAS CEMENTED AN AGREEMENT WITH THE CONGOLESE GOVERNMENT TO HELP IMPROVE CONDITIONS AT INFORMAL MINE SITES IN RETURN FOR COBALT SUPPLIES. AS PART OF THE OFF TAKE DEAL WITH STATE-OWNED ENTREPRISE GÉNÉRALE DU COBALT (EGC), TRAFIGURA WILL FUND THE CREATION OF UP TO SIX STRICTLY CONTROLLED ARTISANAL MINING ZONES (27).

The main motivation for this is to improve human rights abuses and child labor conditions while continuing a relationship for production and stability on the supply chains global market (28).

5. LACK OF EFFORT:

The change in the global market and trade coming from downstream has influenced the livelihoods of individuals and communities more than COVID-19 itself. Yet, miners and other actors are still going about business as usual because of the need for income. This becomes a major issue when the global market changes, as individuals must respond but do not have the luxury of taking measures to combat

the pandemic. The manager of the Civil Strengthening Project for Good Shepherd in the region stated that:

THE ARTISANAL MINING WORK AND MOST INDUSTRIAL ENTERPRISES CONTINUE TO OPERATE WITHOUT RESPECTING THE STANDARDS AS LAID DOWN BY THE DUE DILIGENCE DUTIES OF THE OECD GUIDE IN RELATION TO THE WORST FORMS OF CHILD LABOR IN MINES (26).

6. GOVERNMENT ACTION AND COMMUNICATION:

The DRC government takes little action and communicates even less to locals, particularly regarding COVID-19-safety guidelines and protocols. A report by Kinshasa Digital in September 2020 stated that ‘the majority of households are unaware of any support initiatives implemented by the government to help them cope with the negative socio-economic effects of the [COVID-19 pandemic] crisis (29).’ It is further noted that 80% of households surveyed believed that the government does little or does not respond or help with the difficulties they face in their local mining communities (29). These claims are further supported by a report released this year from USAID, Levin Sources, and Global Communities entitled, *The Impact of COVID-19 on Artisanal Gold Miners in Eastern DRC*. Although the report focuses on gold miners, its findings are similar to those derived from interviews conducted with actors in DRC’s copper and cobalt sectors.

The USAID report on gold miners and COVID-19 noted both a limited governmental response and barriers to implementing prevention measures. The report did note, however; some miners were aware of preventative measures and proactive health protection messages have occurred, even if actual services provided to communities are limited (30). The report further noted the following problems with government COVID-19-related action and communication: a lack of trust in government reporting on

cases both nationally and at the provincial level; limited trust in the health system; a scarcity of hand-washing infrastructure at ASM sites; and, limited government support to fight COVID-19 in ASM communities. The government's lack of action has only exacerbated the distrust miners feel toward the government. An astounding 75% of households stated they rely on radio and television as their primary means of information for COVID-19 intervention and prevention measures, rather than government action and communication, which, it can be argued, should be the primary means of communication (29).

CONSEQUENCES OF COVID-19:

1. MITIGATION TACTICS AGAINST COVID-19

Numerous organizations and institutions have released public statements outlining mitigation measures against COVID-19 for both their own companies and other entities on the ground. The Organization of Economic Co-operation and Development (OECD) has been a leader in these mitigation efforts, releasing a statement in the beginning of 2020, calling on action for responsible mineral supply chains. The introduction of the statement reads:

“WE ARE CALLING FOR IMMEDIATE AND CONCERTED ACTION FROM CIVIL SOCIETY ORGANISATIONS, GOVERNMENTS, FINANCING INSTITUTIONS, INTERNATIONAL ORGANIZATIONS, PRIVATE SECTOR ACTORS AND OTHERS TO SAFEGUARD GAINS RELATED TO DUE DILIGENCE IN SUPPLY CHAINS IN ALIGNMENT WITH THE OECD DUE DILIGENCE GUIDANCE FOR RESPONSIBLE MINERAL SUPPLY CHAINS (31).”

As articulated, the major concern for the OECD is protecting the progress and development of due diligence in responsible mineral supply chains from the negative repercussions of COVID-19. These due diligences encapsulate all factors regarding mining in the DRC, including human rights and labor exploitation protections and other health, safety, and serious risks considerations. OECD’s report lists several methods and precautions that all relevant actors should take to mitigate against COVID-19 impacts. According to the report, such measures include:

-
- 1. Activate humanitarian and emergency response networks to reduce the potentially devastating impacts of COVID-19 on ASM communities,** particularly those related to health and social and economic well-being, acknowledging that women may be more acutely affected, and maintaining trade needs to be balanced with managing risks from COVID-19. Critical responses may involve working with local mineral producing governments and international and local NGOs to sensitize mining communities and support the deployment of health and awareness-raising responses. On-the-ground programmes implemented through NGOs are uniquely placed to leverage existing networks and infrastructure and reach very remote areas otherwise difficult to access.
 - 2. Allocate funds for on-the-ground programmes and SMEs, with conditions.** The crisis necessitates the rapid release of emergency funds for due diligence programmes operating in producing areas, and to support small and medium-sized enterprises in mineral supply chains through loan guarantee programmes and grants. Given implications on cash flow and liquidity, establishing a quick timescale for funding allocation will be important. Encouraging the conditioning of such financial support to programmes on the commitment to continued responsible production and sourcing in line with the OECD Guidance will help governments and businesses ensure that the benefits of such support commitment to continued responsible production and sourcing in line with the OECD Guidance will help governments and businesses ensure that the benefits of such support are shared and that risks related to sourcing from conflict-affected and high-risk areas are adequately managed.
 - 3. Foster the sustainable inclusion of responsible ASM projects into global supply chains, with the support of all stakeholders,** in particular but not exclusively smelters and refineries certified by international industry schemes aligned with the OECD Guidance.
 - 4. Ensuring the right balance of maintaining integrity and flexibility in due diligence efforts during this period.** Due diligence is an iterative process of identifying, prioritising

and mitigating risk. Due diligence should always be undertaken in accordance with domestic law. This means in the short term that expectations for assessments and audits will need to take into account government virus containment and mitigation measures. We invite the OECD Secretariat to prepare a note, in consultation with the MSG, clarifying expectations during the crisis, and explaining how due diligence, in particular on-the-ground risk assessments and audits, may be affected (31).

Several individuals interviewed noted that due diligence audits have been stalled or postponed. As such, it is imperative that all actors are aware of this concern and the potential for severe repercussions. The potential delay in audits for due diligence implementation will be addressed further within our key findings and recommendations sections.

2. FINANCIAL HARDSHIP:

Financial hardship causes a ripple effect that magnifies the impact of COVID on mining communities. While COVID has not necessarily impacted these communities directly, it has had a negative knock on economic impact on households, which has affected their ability to purchase basic goods and services (29). The following statistics from the September 2020 Kinshasa Digital Report indicate the financial crisis and burden these communities face due to the pandemic:

- 94% of households in the DRC have reduced their consumption of basic goods and services during the pandemic.
- Limited signs of recovery, when comparing data from this iteration of the survey with that of last month, are not changing people's overall perceptions about their long-term economic situation.
- 84% of households feel that their long-term financial situation is likely to be worse as a result of the COVID-19 pandemic (29).

3. FOOD PRICES:

A major finding regarding the consequences of COVID-19 is the dramatic impact on local food prices (32). It is a complex dynamic because while artisanal mines are remote, they still suffer and show evidence of the repercussions of the pandemic and the lack of mitigation efforts by the local authorities. Increased food prices and a lack of essential goods are major indicators of the burden placed on these communities by COVID-19. Closed borders, inflation from limited transportation of goods, and the devaluation of the Congolese Franc are contributing factors (2). For example, devaluation is evident in the Congolese Franc's exchange rate. Before the announcement of the COVID-19 restrictions, the exchange rate of 1 US\$ was 1,600-1,700 FC; in May 2020 the exchange rate was 1 US\$ for 2,000 FC (2). Furthermore, inflation rates for key food supplies can be seen in IPIS' September 2020 report:

Some price structures before and during Covid-19 in August 2020

Products	Price before the Covid-19	Price during the Covid-19
salt	300 à 500 Congolese franks (FC)	1000 à 1500 Congolese franks
¼ kg of rice	200 Congolese franks FC	500 Congolese franks FC
1kg potatoes	500 Congolese franks FC	1000 Congolese franks FC

The exchange rate went from 1600 to 2000fc per dollar.

Numerous other reports noted food insecurity as one of the greatest challenges and consequences of COVID-19 for these artisanal mining communities. In a report issued in October 2020 by PACT and the World Bank for the Delve Database, the main causes of food insecurity have been identified as arising from food price inflation and reduction in household income (33). Several individuals interviewed for this report similarly expressed that food insecurity and income have motivated people to continue mining in order to withstand the additional financial hardship. It has been observed that food prices have increased, especially in international supply chains (34).

4. SECURITY:

Prior to COVID-19, security was frequently cited as a concern, particularly for artisanal and ASM mines. Security is a concern because the informal structure at these ASM mines allow for security administration to retain immense power, sometimes abusing their position and engaging in aggression and violence. However, our interviews and literature research do not suggest that the security situation has been altered or impacted by COVID-19. As stated in the IPIS report in September, “Security wise, the first semester of 2020 has been particularly violent in eastern DRC. There is however no clear correlation between changes in the level of violence and the Covid-19 outbreak (2)” Yet, as this report notes with respect to the gold sector, one security element that has changed as a direct result of COVID-19 is an increased presence of mining police overseeing implementation of COVID-19 safety measures (2). Police fine violators of these protective measures between 5,000 to 25,000 FC. In Shabunda, an increase in harassment by mining police and other law enforcement officers reported since the outbreak of Covid-19 includes illegal taxation (2).” However, an increase in mine police in the copper-cobalt mines has not been reported.

The Delve report prepared by PACT and The World Bank notes:

“62% OF RESPONDENTS STATE THAT SECURITY HAS REMAINED THE SAME WITH AN ADDITIONAL 9% STATING THAT INSECURITY HAS DECREASED. SECURITY HAS NOT SUBSTANTIALLY COMPROMISED WORK TO PROMOTE RESPONSIBLE SUPPLY CHAINS, FREE OF CONFLICT. THIS GIVES IMPETUS TO CONTINUE THE HARD WORK TO MAKE GLOBAL MINERAL SUPPLY CHAINS MORE TRANSPARENT AND ACCOUNTABLE. IT GIVES RISE TO THE OPPORTUNITY TO RADICALLY REAPPRAISE THE WAY IN WHICH SUPPLY CHAINS HAVE FUNCTIONED TO DATE, TO MODERNIZE THESE TRADE CHAINS, AND TO INTRODUCE NEW MINE MODELS WHERE GREATER BENEFITS CAN ACCRUE TO MINERS ON THE GROUND (33).”

5. WOMEN:

There is an increasing concern about the pandemic's impact on women's roles. It has been noted by several reports and sources that women have continued to work in the mines in postings that are the same as prior to COVID-19, highlighting the need to continue to address issues that have been prevalent historically, including pay inequality, gender-based violence, and the need to increase women-led and women-owned mining entities (33). Women have been most impacted by a reduction in hours or days they can work due to COVID-19 restrictions on site (33).

6. OPPORTUNITIES:

As daunting as these challenges are, they can also spark innovation and motivation among miners and the entire mining community to strengthen the stability and longevity of the sector. As stated in the Kinshasa Digital report, "... economic shocks may also bring opportunities for innovation in their business model or they may pave the way for the advancement of certain specific strategic issues. On both levels, access to factual information adds great value to the thinking process (29)." The COVID-19 circumstances develop a new space to create economic alternatives and diversification of local economies in the artisanal mining community, such as focusing on the agricultural sector and house-labor. The agricultural sector, though, is overlooked because, as stated:

MINE WORKERS HAVE DEVELOPED A CULTURE THAT EMBRACES THE IMMEDIACY OF CASH PAYMENTS AS A CENTRAL ADVANTAGE OF MINE WORK, AND MANY INTERVIEWEES DOUBTED THAT THE AVERAGE MINE WORKER WOULD 'GO BACK' TO SUBSISTENCE FARMING WITH UNCERTAIN AND ONLY DELAYED RETURNS ON INVESTMENT (18).

It is imperative to promote and invest in local entrepreneurial endeavors that offer accessibility, mobility, and child-labor free working conditions (18).

COVID-19 further provides an opportunity to strengthen and continue programs already in place, as these programs have invested time and money. More importantly, many existing programs have fostered trust within the local community, which could assist with knowledge disbursement and understanding of COVID-19. To ensure heightened local acceptance, introduction of new materials, methods, and structures should continue to operate through established channels. For instance, PACT has received positive feedback on radio, call-in stations, and podcasts that provide COVID-19 information. Furthermore, as a health crisis, COVID-19 provides an opportunity to gain insight into health-related infrastructure issues so lacking in the DRC. While organizations like PACT have implemented short-term projects such as soap and face mask production, there is a need and opportunity to focus on hygiene in general, such as access to reusable materials and clean water (25).

The COVID-19 pandemic also provides opportunities for key investors and private sector actors to set up and help with core, deep-rooted issues. Companies like Trafigura and Chemaf are working in collaboration with international non-profit organizations, PACT, on a number of fronts: to combat COVID-19 misinformation; to provide alternative economic opportunities for children at risk of returning to working in mines; and, to support the DRC health agencies in fighting the virus (20). Other companies, government agencies, and multi-stakeholder groups are forming similar partnerships with local NGOs and civil society organizations to combat several of the consequences of COVID-19 listed below, such as tracking child labor during COVID-19, communication tactics, and formalization needs.

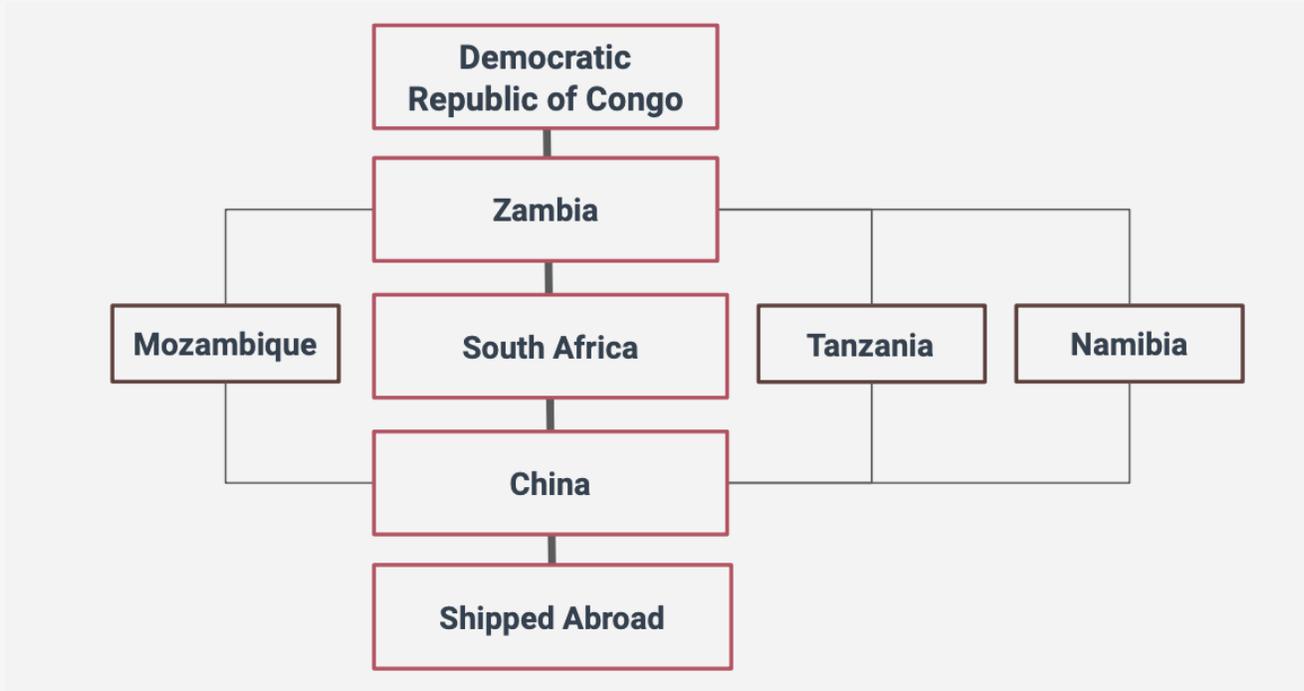
SUPPLY CHAINS

1. PRE-COVID

The artisanal copper-cobalt mining sector is a complex and confusing process as informality makes it difficult to effectively track and monitor the movement of minerals. The following information explains the process and actors associated with the copper-cobalt supply chains:

- Miners (Extractors) - These persons dig the tunnels and extract the minerals from the mine site. In an official mining site, the miners are employed by a mining company. ASM communities may have local sponsors as well as illegal mining sponsors/activity.
- For Artisanal miners, the minerals are sold from the miner to an intermediate negotiator. These intermediates normally purchase the minerals at a minimal price in order to later sell them to an exporter. Mining companies export the minerals to overseas buyers.
- Other parts of the supply chain include the workforce that loads/unloads the minerals, mine company employees that pack the minerals, and the drivers that transport it.
- Pre-Covid, the preferred exportation route was through Durban and/or Richards Bay, South Africa and Dar es Salaam, Tanzania. The modern highway infrastructure made it more reliable and less expensive. The paved highway meant not having to offload product onto a railway system for parts of the journey.

A chart depicting the findings of the supply chains for cobalt-copper pre- COVID-19:

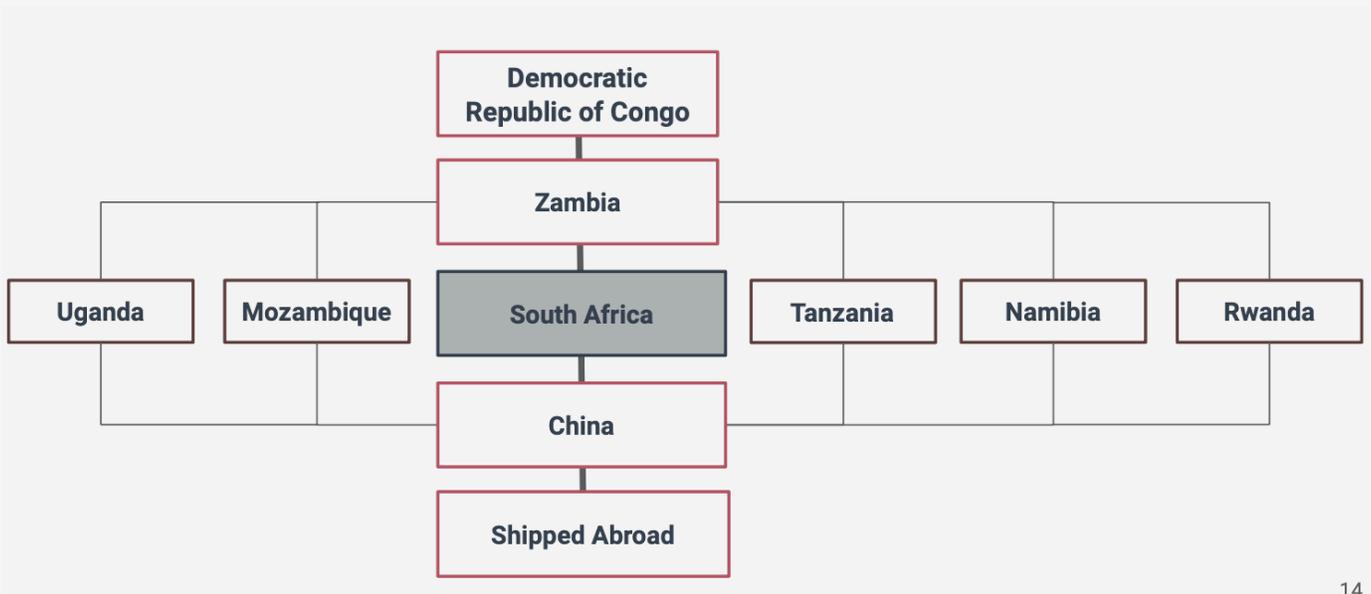


2. DURING-COVID

During COVID-19, the supply chains for all minerals exported from the DRC changed significantly:

WHEN THE DRC'S BORDERS WITH NEIGHBORING COUNTRIES WERE CLOSED, PROCESSING HOUSES (COMPTOIRS) EXPERIENCED GREAT DIFFICULTY TO EXPORT. THEIR MINERAL WAREHOUSES GOT PACKED AND THEY DID NOT GET ANY INCOME. CONSEQUENTLY, MANY CEASED TO PRE-FINANCE TRADERS, WHO ON THEIR TURN RAN LOW IN CASH. AS A RESULT, MANY TRADERS STOPPED VISITING MINING SITES (2).

Here is a chart depicting the findings of the changing supply chains for cobalt-copper during COVID-19:



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COVID-19 not only affects the export routes, but has a ripple effect on the laborers working in the industry. With the closure of borders, laborers working as freight transporters, loaders/unloaders, and in small businesses reliant on these workers are all impacted.

Additionally, the overall drop in demand of the mineral affects the frontline worker upstream actors like miners and intermediators. During the COVID-19 pandemic, the transport route through South Africa was disrupted due to border closings. The result has been higher usage of the transport route through Dar es Salaam and usage of transport routes through Namibia and Mozambique.

The spread of COVID -19 required mining companies to lockdown the worksites, which means employees are unable to leave the site. There are reports these employees are not receiving fair treatment, including working without the proper PPE and being forced to work irregular hours (35). The situation is exacerbated by the fact that watchdog agencies and NGOs are unable to monitor because they were forced to shut down and leave the area in order to mitigate against the risk of infection of employees (36).

COVID-19's effects on other aspects of society have raised concerns surrounding child labor within the cobalt and copper mining sector. For example, COVID-19 has delayed the reopening of grade schools from the summer break (36). Without school, children do not have a place to go while their parents are working in the mines, leaving some parents no option but to take their children to work with them.

THE LAWSUIT AGAINST MULTINATIONALS

At The International Rights Advocates (IRA), a Washington D.C.-based human rights firm representing fourteen Congolese families filed a lawsuit on December, 15, 2019, against Apple, Google, Tesla and Microsoft (36). The main argument the IRA presented was that the technology companies had “specific knowledge” that the cobalt used in their products was connected to supply chains using child labor (37). The case is being held in the United States, likely because the IRA is in Washington, D.C.-based. Siddharth Kara, a Harvard anti-slavery activist working with a human rights activist who was forced to flee the DRC because of their connection to the lawsuit, said:

WE ARE MONITORING THE SITUATION IN THE DRC VERY CLOSELY. THE AGGRESSIVE THREATS AGAINST OUR COLLEAGUES AFTER THE FILING OF OUR LAWSUIT IS FURTHER TESTAMENT TO THE FACT THAT THE HUMANITY OF THE IMPOVERISHED PEOPLE OF THE CONGO, WHO MINE COBALT IN HORRENDOUS CONDITIONS, IS CONSIDERED LITTLE MORE THAN AN IMPEDIMENT TO THE IMMENSE PROFITS BEING GENERATED BY THE GLOBAL COBALT INDUSTRY (38).

The four companies being sued filed a joint motion to dismiss the case on August 26, 2020 for the following reasons:

- The IRA did not identify a ‘fairly traceable’ injury to the tech companies in their initial lawsuit language.
- The IRA is trying to expand a provision of the TVPRA, the Trafficking Victims Protection Reauthorization Act, to make it relevant to the case.
- The IRA’s TVPR claim seeks to impose civil liability on Defendants for injuries suffered overseas at the hands of foreign actors.
- Plaintiffs’ common law causes of action fail because they do not allege the conduct which would sustain a “Cause of action for unjust enrichment, negligent supervision, or intentional infliction of emotional distress (39).”

KEY FINDINGS

THIS SECTION INCLUDES RECOMMENDATIONS AND GOALS INCLUDING SHORT-TERM AND LONG-TERM



One quote from an email correspondence summed up the key findings stating:

I ASSURE YOU THERE ARE FAR MORE DANGEROUS AND AWFUL THAN COVID (NOT SAYING COVID ISN'T BAD - TRYING TO PUT PERSPECTIVE ON THOSE WORKING CONDITIONS). THE REALITY IS THAT ANY IMPACT ON PRODUCTION IN THE DRC AND THE DOMESTIC SUPPLY CHAIN IS DRIVEN BY COMMODITY DEMAND (AND THEREFORE PRICE), AND NOT THE VIRUS. REMEMBER, THE MINERS ARE USING SHOVELS AND HAND POWER. THEY DO NOT RELY ON ANY SUPPLY CHAIN FOR MACHINERY OR FUEL. ONCE THE COMMODITIES LEAVE THE DRC THERE ARE SUPPLY CHAIN IMPACTS, BUT MOSTLY AROUND CAPACITY IN SHIPPING, ETC (40).

After an extensive study of the impact of COVID-19 on cobalt-copper artisanal and small-scale mining (ASM) supply chains in the Democratic Republic of Congo (DRC), with a focus on child labor, we report the following key findings:

1. The COVID-19 pandemic has triggered an economic decline in the DRC, a country that highly depends on mining, with the industry contributing 32% of its GDP and 95% of export revenue in 2018. Due to COVID-19, the DRC's GDP growth slowed from 3% in 2019 to -2% in 2020 (41).
2. Furthermore, COVID-19 has contributed to a subtle, indirect upstream negative impact on the cobalt and copper mining industries, especially regarding child labor. The issues pertaining to cobalt-copper communities within the Copperbelt region of the DRC prior to COVID-19, but worsened because of the global pandemic.
3. Upon border closures with neighboring countries, the negative economic impact of COVID-19 on DRC's ASM communities intensified because exporters had difficulty using the regular supply chain. This in turn meant that mineral traders lacking in cash flow were unable to buy at pre-COVID volumes (2).
4. The overall impact of COVID-19 on child labor and conflict (defined throughout this report as security) is observed as minor. Child labor and conflict are still prevalent, but have not increased significantly solely due to COVID-19. However, they have manifested due to side effects of the global pandemic.
5. The current price of cobalt is volatile and trending downwards. The price of copper and gold have been increasing and observed as more stable. The cobalt prices hit a high of \$100,000 per ton in 2018 but the prices crashed in 2019 to around \$30,000/ton due to a combination of factors including increased production and a slowdown in purchases (42).
6. The slowdown of local and international trade decreased mineral prices; the lower ASM revenues hit local mining communities hard, especially because these decreases were coupled with increased consumer goods prices. Additionally, COVID-19 caused some food prices to increase by 150% from pre-COVID-19 levels.

7. The price pressures combined with COVID-19 restrictions have shifted miners to work elsewhere (either from cobalt to copper or to other minerals, like gold).

8. COVID-19 induced government, company, travel, and supply chain restrictions have impacted large scale cobalt production in the Copperbelt region.

9. The responsive phase of the COVID-19 pandemic should focus on food security, currency stabilization, income help, and formalization, as pertaining to cobalt and copper ASM.

10. There is wide variation in definitions of essential terms for this sector, such as: child labor, conflict, cobalt artisanal and small-scale mines. Therefore, actors engaged in the sector must formulate simple and practical definitions regarding matters relating to ASM and small-scale mines, specifically for the cobalt-copper sector.

RECOMMENDATIONS

BASED ON RESEARCHING AND INTERVIEWING EXPERTS ON THE IMPACT OF COVID-19 ON COBALT AND COPPER ARTISANAL AND SMALL-SCALE MINING THE FOLLOWING RECOMMENDATIONS AND GOALS COMPLEMENT THE FINDINGS AND FACILITATE PROGRESS.

OVERARCHING RECOMMENDATION

COVID-19 must be evaluated through a “risks vs. impacts” lens. To do so requires both short-term and long-term investment and collaboration between organizations and the community. Additionally, globally, we must recognize that we are still in the response stage of the COVID-19 pandemic. Therefore, it is crucial that monitoring and evaluation mechanisms be created and short-term and long-term goals be established. Adaptive management remains crucial to the success of any program, as the circumstances surrounding the pandemic continues to change.

Ideally, long and short-term efforts will be directed through the Craft Code risk framework, which emerged from the Development of Responsible Mining framework. Codifying how risk should be categorized and mitigated, specifically regarding COVID-19, is a new endeavor necessary for developing implementation and response standards in order to assist with compliance (43).

SHORT-TERM GOALS AND RECOMMENDATIONS

The following short-term goals are focused on understanding and combating the impact of COVID-19 as the virus and its impacts progress:

A. Invest in community groups, such as “neighborhood committees” at mine locations for accurate and thorough information regarding COVID-19, child labor and other impacting factors like changing prices.

1. Fund pre-existing programs such as Children Out of Mining Program, WORTH, and Global Battery Alliance programs in the DRC.
2. Investigate EGC and the potential shift towards monopolization of ASM minerals from the government, which potentially counter the Mining Code.

B. Continue supporting and developing effective and creative radio advertising for COVID-19 health and safety compliance.

1. Support more local data collectors (IMPACT, PACT, IPIS, LEVIN SOURCES, DELVE, AfreWatch, and BetterChain Lead) in advancing data collection methods, including: creative call and communication methods between organizations and communities.

C. The ability to survey and scale must be developed further. When available, organizations can enlist local data collectors and consultations like AFAl in order to better inform programming and policy decisions.

D. Research aimed at map migration of cobalt and copper miners across regions and between different minerals must be pursued to efficiently and effectively observe mineral movement. Additionally, efforts should be made to better understand why miners move locations or begin mining different minerals.

LONG-TERM GOALS AND RECOMMENDATIONS

Long-term recommendations focus on mitigating the impact of COVID-19 in the future and how these mitigation strategies impact pre-COVID circumstances:

A. Supporting and investing in auditing is imperative for improving conditions and standards of ASM and small-scale mine sites. As travel and local interaction has become more difficult, audits for Due Diligences have slowed or been postponed. Audit support should include reexamining the structure of Due Diligences audits to encompass COVID-19 factors such as how COVID-19 has changed the formalization of ASM and small-scale mining.

B. Additionally, legal security and surveillance should be reinstated at reopened artisanal and small-scale mine sites to continue thorough implementation of formalization procedures.

C. For thorough continuation of ASM formalization, improved investment in public diplomacy such as Government/NGO media campaigns addressing legal rights of miners, child miners, etc. remains crucial (2). Overall, formalization of ASM will:

1. Produce several social and economic benefits for mining communities including creating stable employment for adults, which will reduce the need for extra income from child labor.
2. Achieve higher productivity levels and generate higher income for miners as a result of better-organized operations. Formalization will improve the health of miners and community members.
3. Create new business opportunities in response to higher output levels and higher demand for goods and services (7)
4. Create artisanal mining zones and remove impediments to industrial mining zones. There must be strict policies for mining companies to meet their legal obligation and support social-economic development (44).

D. Invest in or establish initiatives to diversify sources of income for members of the mining community. This will work to mitigate the Copperbelt community's dependency on mining for income.

E. Establish transparent and creative information chains showing actors and actions throughout the supply chain for downstream actors like companies and consumers. Additionally, downstream actors need to invest more in contextual understanding and in presenting information to the public. Companies should also provide platforms for consumers to better understand ASM mining.

F. To improve the economic condition of artisanal miners, the DRC's government must depoliticize the artisanal sector by allowing all cooperatives to have viable artisanal mining sites. Furthermore, the government must facilitate access to bank loans (10).

CONCLUSION

Based on the research and analysis provided throughout the report, our research group has compiled the most updated overview of the current cobalt and copper artisanal and small-mining sectors situation. As the report demonstrates, the COVID-19 pandemic has had a number of unexpected consequences for the cobalt and copper ASM mining sector in the Copperbelt region. The research demonstrates the pandemic has exacerbated some of the problems that already existed for miners including exploitive labor, child labor, fluctuation in mineral prices, and the total reliance of the region's economy on mining. Additionally, the COVID-19 pandemic has altered the supply chains of these minerals. In order to address these pressing issues, the research group advises adherence to the report's goals and recommendations. These goals and recommendations are applicable to a wide range of actors involved in cobalt and copper artisanal and small-mining sectors, including local groups and multi-stakeholder organizations.

In order to address these pressing issues, the research group advises adherence to the report's goals and recommendations. These goals and recommendations are applicable to a wide range of actors involved in cobalt and copper artisanal and small-mining sectors, including local groups and multi-stakeholder organizations. Failure to implement these recommendations into practice risks worsening the pandemic's consequences on artisanal miners.

APPENDIX

APPENDIX A

American University Work Plan for Department of Labor

Khalifa Abdullah, Galen Gammino, Mone Gonzalez, Jamie Wallisch, Aashiqlah Zazai, and Tyler Brazitis

Objective:

A focused research report on how COVID-19 impacts the supply chains of copper and cobalt in the DRC and consequences on labor. The report will include proposed strategies to mitigate, overcome, or take advantage of any opportunities that have arisen due to COVID-19 to better labor standards (and reduce conflict).

Research Objectives:

1. Focus on two supply chains within the DRC, specifically within the Copper Belt:
 - A. Cobalt
 - B. Copper
 - C. Comparative Analysis (as necessary with other minerals)
2. Human rights and labor issues: Supply chain oversight and compliance mechanisms Conflict and human security
3. Impact of COVID-19 and related health threats on these two supply chains *

***Highlighted topics are the point of emphasis for our research, including their conjunction before and during COVID-19. Naturally these topics link together but our goal is to identify how these parts of ASM have changed in the DRC since COVID-19 and why.**

Research Methodology:

1. Undertake desktop research on the changes either exacerbated, ameliorated, or undisturbed on the copper and cobalt ASM supply chains child labor due to COVID-19.
 - a. Map the structure of the supply chains both prior and during COVID-19. This includes potential areas of child labor within different countries and areas, depending on the path of the particular supply chain from the DRC.
 - B. Use initial research and resources collected from desk-based research to create a solid foundation in our knowledge base of these supply chains and child labor.
 - C. Use further resources given from the client to investigate the missing data or gap analysis with a focus on cobalt and copper.
 - D. Present evidence on the role of both local and non-local actors including regional and international governments, private sector entities, international organizations, non-governmental organizations, and other stakeholders.

2. Conduct interviews with stakeholders, e.g., NGOs, CSOs, governments, private companies, responsible sourcing initiatives, etc. to augment and fill in gaps in relevant primary, secondary and gray literature. (Clients will help identify and make introductions for interviews whenever possible.)
 - A. Develop questionnaires for stakeholder interviews consisting of structured and open-ended questions.
 - B. ILAB will provide additional resources once the research study begins.
 - C. ILAB will provide contact information for people on the ground, other abroad government agencies, and NGOs, which are involved in this work and may acquire helpful information.

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D. The research group has received an initial contact list from ILAB and for the rest of the project, we organize the links and contact information via that sheet.

E. Conduct a gap analysis relative to existing data on ASM, labor and human rights, and social conflict in the DRC. (We already know the supply chains lack research in both child labor and COVID-19 effects).

3. Incorporate quantitative analysis using data collected through desktop research as needed. Create visual synopses (graphs, charts, infographics) of key research findings.

4. Provide a Project report.

1. In-depth Written Report:

- a. Executive Summary
- b. In-depth study about the impact of COVID-19 on selected ASM supply chains with local and non-local actors
- c. Gap Analysis – what information cannot be acquired through literature and direct research.
- d. Appendices, to include the following:
 - i. Academic, literature and research resources utilized in the report
 - ii. List of questions utilized for the stakeholder interviews
 - iii. List of all existing indices and data utilized, including web links, host organizations, etc.

2. PowerPoint Presentation:

- a. PPT presentation will have a strong focus on the impact of COVID-19 on selected ASM supply chains. (75%)
- b. PPT presentation will include information about research methodology, limitations, research findings, and recommendations for future research. (25%)

APPENDIX B

INTERVIEW QUESTIONS

.Project Objective: A focused research report on how COVID-19 impacts the supply chain and consequences on labor. Then propose strategies to mitigate, overcome, or take advantage of any opportunities that have arisen due to COVID-19 to better labor standards (and reduce conflict).

General questions:

1. What is your understanding and breakdown of the history of copper and cobalt in the copper belt of the DRC?
2. From your research, who are the key players in the supply chain? NGOs, government institutions, other countries?
3. What is the chain of transport for minerals? How are they transported? Through what countries? If transported through many other countries, what are the benefits/impact on these countries?
4. Why is the supply chain structured this way today? Do you think it can be easily penetrated and revised?
5. How do individuals on the ground feel about working at ASMs? Why don't the Mining Codes apply to artisanal mining? Can this change?
6. What are the locals' biggest struggles in their world today? Education, poverty, government/oppression, violence, etc...
7. What are potential goals or successes you wish to see in the supply chains in the copperbelt of the DRC?
8. How did you get into your position? Brief synopsis of how you came to write this report/get into this line of work, etc?
9. What's your knowledge of labor inspections/inspectors? Why have they failed in the DRC? How do you think they can improve? Who should hold accountability?
10. In your opinion (or based on your research, which are the due diligences that require the most attention?

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11. How do you think the child labor and oversight of it will be affected by COVID-19?
 12. With the preface that there is little information on this topic, what is your knowledge of COVID-19 impacting these supply chains in the copperbelt of the DRC?
 13. Key players in dealing with this crisis at this location?
 14. What is happening to other issues affiliated with supply chains like child/informal/forced labor?
 15. In regards to the methodology of your research, what did you think worked well? What could be improved?
 16. What were your most helpful/knowledgeable/ guiding sources for information? What was the structure of communication with them (i.e. email, phone, in-person)?
 17. If in-person interview, what were your interview methods?
 18. What is your knowledge of child labor in the copperbelt of the DRC? Who do you think would be the best source to contact for further information?
 19. Dominant reason for child labor in ASM mines prior to COVID-19 was to increase family income? Is this still true during COVID-19?
 20. Since COVID-19, has child labor in ASM mines in the DRC increased, decreased, or stayed the same. Why? What is the evidence?
 21. What is the child labor throughout the entire supply chain, not just DRC? I.e. Zambia, Tanzania, South Africa, Namibia? And at different points of the supply chain i.e. transport or buying markets?
 22. How do you think decisions, like Battery Day with Telsa, will impact these communities and child labor?
 23. MNE enforcement and power over child labor during COVID-19?

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