IPIS insights



THE IMPACT OF COVID-19 ON ARTISANAL MINES IN WESTERN CENTRAL AFRICAN REPUBLIC



EDITORIAL

Cover picture:

On the gold mining site of Kouna-Gbabaza near Abba, women make up for half of the workforce.

Picture IPIS surveyors, 2019.

Author: Alexandre Jaillon, Researcher and GIS manager (<u>alexander.jaillon@ipisresearch.be</u>)

Editor: Lotte Hoex, Researcher (<u>lotte.hoex@ipisresearch.be</u>), Thomas Muller, GIS and data officer (thomas.muller@ipisresearch.be)

Data analysis: Thomas Muller, GIS and data officer (thomas.muller@ipisresearch.be)

To quote this publication please use:

A. Jaillon, *The impact of Covid-19 on artisanal mines in Western Central African Republic*, IPIS Insight, January 2021.

This document has been produced with the financial assistance of the European Union. The contents of this document are the sole responsibility of the authors and can under no circumstances be regarded as reflecting the position of the European Union.



TABLE OF CONTENTS

1.	Introduction	. 4
2.	Presence of children on mining sites	. 5
3.	Impact on gold and diamond prices	. 6
4.	Limitations of the study	. 8
5.	Concluding remarks	g

1. INTRODUCTION

To assess the socio-economic impact of the Covid-19 pandemic on the artisanal and small-scale mining (ASM) sector in Western Central African Republic (CAR), IPIS surveyors conducted a series of phone interviews targeting key informants¹ to collect knowledge on mineral production, prices and illegal taxation. In addition to collecting quantitative estimates, surveyors used open-ended questions allowing the respondents to detail their observations on the ground (i.e. qualitative data). Phone surveys were conducted in May 2020 (on a total of 105 ASM sites), July 2020 (on a total of 175 ASM sites) and October 2020 (on a total of 260 ASM sites) in Nana-Mambéré, Mambéré-Kadei, Ouham-Pende, Ombella-Mpoko, Lobaye, Ouham Sangha-Mbaéré.

This Insight report provides information on a subset of 95 artisanal mining sites that were surveyed both in May 2020 and in October 2020². The information gathered over the phone was then compared with baseline information on the same 95 mining sites from field visits in 2019³ (Figure 1).

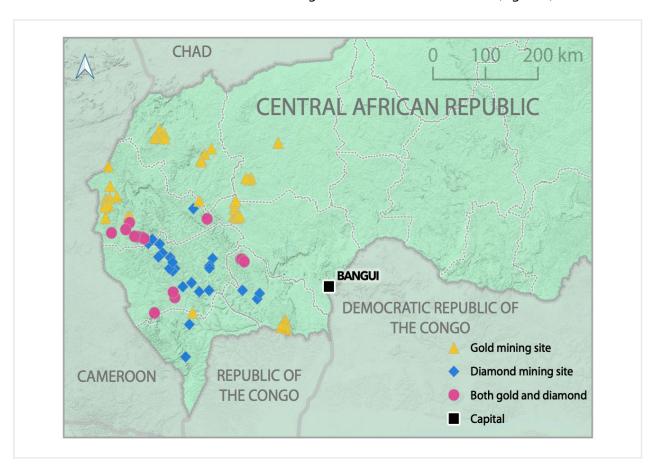


Figure 1: Map of the 95 mining sites that have been surveyed over the phone both in May and October 2020.

The key informants were selected from a list of informants gathered in 2019 on artisanal mining sites, when IPIS teams visited 322 gold and diamond sites in Western CAR. More information is available in: A. Jaillon, G. de Brier, Cartographie des sites miniers artisanaux dans l'ouest de la Centrafrique, IPIS, November 2019. Available at: https://ipisresearch.be/publication/mapping-artisanal-mining-sites-western-central-african-republic/

² Including 30 mining sites in Nana-Mambéré, 18 in Mambéré-Kadei, 16 in Ouham-Pende, 12 in Ombella-Mpoko, 11 in Lobaye, 6 in Ouham and 2 in Sangha-Mbaéré.

For more information about the previous data collection cycle, please refer to: A. Jaillon, *The impact of Covid-19 on Gold and Diamond Artisanal Mines in Western Central African Republic*, IPIS insight, July 2020. Available at: https://ipisresearch.be/publication/impact-covid-19-gold-diamond-artisanal-mines-western-central-african-republic/ as well as the most recent factsheet published in September 2020 and available at: https://ipisresearch.be/publication/the-impact-of-covid-19-on-artisanal-mines-in-western-car/

Table: Median average of the data collected from the 95 mining sites that have been surveyed at each data collection cycle⁴

	Spring 2019 Baseline (Field visit)	May 2020 (Phone survey)	October 2020 (Phone survey)
Number of workers, including women and children	70	70	80
Number of women	20	20	20
Number of children*	10	13	10
Number of buyers	3	1.5	0
Price of one gram of gold at the mining site (XAF)**	15,000	17,000	20,000
Price of gold expressed as a percentage of the world market price ⁵	60%	50%	53%
Production of gold (in gram)	49	77.5	61
Price of one carat of diamond at the mining site (XAF)	180,000	90,000	80,000
Production of diamond (in carat)	0.75	3	4.25
Armed group presence	16 AntiBalaka	11 Antibalaka	10 Antibalaka
	14 3R	18 3R	8 3R

^{*} Children are more present on gold mining sites than on diamond mines.

2. PRESENCE OF CHILDREN ON MINING SITES

A previous IPIS study on a larger sample (105 mining sites) has shown a significant increase in child workers in the weeks following the Covid-19 outbreak (median from 10 to 15, p = 0.02). The present study, on a smaller sample, shows a lower increase between baseline (2019) and May 2020, from 10 to 13 child workers. The statistical test does not detect a significant difference due to the high variability in number of child workers in the sample and the sample size. While we cannot conclude with confidence that the number of child workers has significantly increased in the study area based on the quantitative estimates provided by the surveyors, informants in 23 different mining sites (out of 95 sites) reported the presence of children as new mine workers. It is therefore likely that the closure of schools had locally led to an increase in the number of child workers. In October 2020, as schools reopened, the number of children in mining sites seems to be back to the estimates of 2019 (i.e. a median average of 10 child workers per site).

^{**} Interviews with key informants suggest that the price of gold at the mining sites might have increased (up to 20,000-22,000 XAF) between IPIS 2019 field surveys and the end of 2019, before it dropped to 17,000 XAF when our study began. These variations would result from market distortion related to Covid-19.

Cells in green show a strong evidence toward significant changes (Wilcoxon signed-rank test, paired samples and significance level at p < 0.01). Cells in orange do not show statistically enough evidence of a significant change when compared to the baseline.

For more information on calculation of the price of gold as a percentage of the world market price, please refer to A. Jaillon, *The impact of Covid-19 on Gold and Diamond Artisanal Mines in Western Central African Republic*, IPIS insight, July 2020, p11-12.

⁶ Ibid.

p = 0.09, above our significance level.

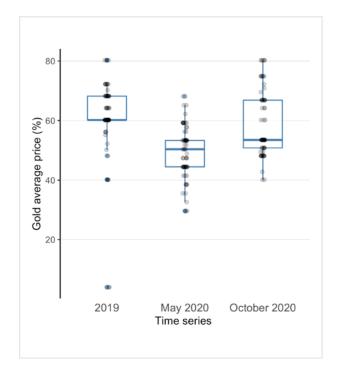
The median absolute deviation for child workers is 13 and 15 for respectively baseline and round 1. This indicates a relatively high dispersion of the data within the sample.

As previously reported by IPIS in 2019, children are about twice more present in gold mining sites than in the diamond sector. As gold mining is historically considered as a less-noble activity than diamond mining in the CAR, it was mostly conducted by women and children as a side-activity (looking for gold in the diamond mines tails)⁹. Since the 2013 political crisis and the disruption of pre-financing networks, workers started to shift from diamond to gold mining¹⁰, but the number of children working on the gold mining sites remained higher than on diamond mines.

3. IMPACT ON GOLD AND DIAMOND PRICES

In May 2020, the gold price per gram as negotiated at the mining site had dropped from 60% to 50% of the world market price (Figure 2). The majority of key informants explained this drop by travel limitations and the closure of international borders which limited the access of buyers to the mining areas. From May 2020 to October 2020, the median average gold price per gram went from 17,000 XAF to 20,000 XAF on the 95 mining sites surveyed. This corresponds to an increase from 50% to 53% when compared to the world market price for gold which was also on the rise in the same period.

Figure 2: Evolution of the gold price per gram at the mining sites in percentage of the world market price for gold (boxplot).



These numbers support the trend found in our most recent publication from September 2020¹¹: the gold price is slowly recovering to pre-Covid19 prices. In our subset of mining sites, we noticed a strong clustering (i.e. spatial autocorrelation) of gold prices at the level of the mining sites. Mines that are closer to the Cameroonian border seem to practice a lower gold price than mines located further away from the border. Moreover, the gold price tends to recover slower in the border area than the price on the mines further east (Figure 3).

[&]quot;Before the crisis, gold mining was seen as a marginal activity compared to diamonds, with many gold diggers being women and children." IPIS – DIIS, Central African Republic: Conflict Mapping, Antwerp, September 2018, p. 80. Available at: https://ipisresearch.be/publication/central-african-republic-conflict-mapping/

¹⁰ A. Jaillon, G. de Brier, *Cartographie des sites miniers artisanaux dans l'ouest de la Centrafrique*, IPIS, November 2019, p. 8. Available at: https://ipisresearch.be/publication/mapping-artisanal-mining-sites-western-central-african-republic/

¹¹ See the previous factsheet published in September 2020 and available at: https://ipisresearch.be/publication/the-impact-of-covid-19-on-artisanal-mines-in-western-car/

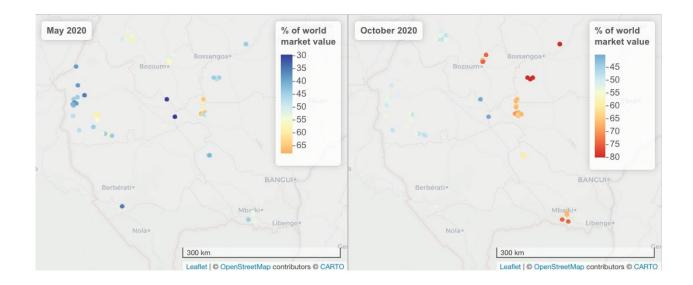
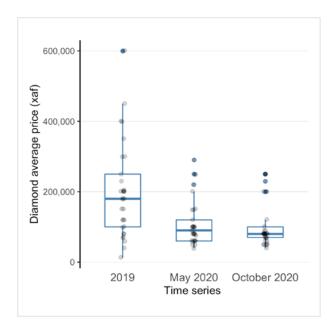


Figure 3: Map of gold prices at the mining sites in May and October 2020. Between May 2020 and October 2020, sites that are closer to the Cameroonian border seem to practice a lower gold price and the price tends to increase slower than the mines further east.

The diamond price (per carat) negotiated at the mining sites dropped from a median average of 190,000 XAF in 2019 to 85,000 XAF in May 2020 and later stabilized around 80,000 XAF in October 2020 (Figure 4). As diamond prices did not recover since the outbreak of Covid-19, an increasing number of miners are reported to be leaving diamond mines to dig for gold in areas where both minerals are present (as explained in the quote below).

Figure 4: Evolution of the diamond price per carat at the mining sites in Central African Francs (XAF) (boxplot).



Although the estimates on the number of workers collected by phone interview do not show major changes over time, some informants reported that the decrease in diamond prices due to the Covid-19 pandemic encouraged workers to choose for gold mining instead.

« A cause de la baisse du prix des diamants suite à l'épidémie du coronavirus, la majorité des artisans se lancent à la recherche de l'or plutôt que du diamant. On assiste également à un exode vers les zones aurifères ». Artisan minier sur le site de Maoro (Préfecture de Lobaye).

The drop in diamond prices observed at the mining sites over phone surveys was also confirmed by interviews conducted with three diamond and gold buying houses in Bangui in late October. The exporters explained that the pandemic strongly impacted their activities.

« La maison mère n'a pas travaillé pendant 8 mois dû à la quarantaine et on a eu en tout une perte de 2 à 3 milliards de francs CFA. » Interview with gold buying house (A) in Bangui.

While travel bans affected their ability to buy production from mining areas, buying houses in Bangui reported that the trends for both gold and diamond prices were also visible on the international market. The price for gold increased in Bangui, although not as much as the world market price.

« Notons que le prix de l'or a augmenté, la crise a développé la peur avec un changement de prix de 20% plus cher. De ce fait, le gramme en janvier 2020 était de 22.000 FCFA et il se vend maintenant [en octobre 2020] à 30.000 FCFA », Interview with gold buying house (A) in Bangui.

On the contrary, the price for diamond on the international market did not recover yet from the pandemic.

« Le prix des diamants jaunes a baissé de 40% et les diamants blancs ont baissé de 20%. » Interview with diamond buying house (B) in Banqui.

Buying houses also complained about losing their investments when state-level travel restrictions were imposed due to the pandemic¹². They were not able to retrieve the money they spend in pre-financing of mining activities through their networks of diamond collectors.

« Nous avons laissé chez les collecteurs plus de 400 millions de FCFA que nous n'arrivons pas à récupérer, nous n'avons pratiquement pas de clients, le prix du diamant sur le marché international est en baisse et il y a une concurrence déloyale du fait de la fraude qui a augmenté. » Interview with diamond buying house (C) in Bangui.

Official exports of diamonds rose from 0 in the second quarter of 2020, to 12,848 carats in Q3 and 28,500 carats in Q4.¹³ This was made possible by the reopening of air and ground travel in August 2020. A new Belgian diamond trading company, CCO, seems to be responsible for almost all of CAR's diamond exports in 2020, taking advantages of the lower prices of Central African diamonds.

¹² See in particular "Table 1: list of measures adopted by the CAR government with a potential impact on ASM production and trade" in A. Jaillon, *The impact of Covid-19 on Gold and Diamond Artisanal Mines in Western Central African Republic*, IPIS insight, July 2020, p. 6.

¹³ Footnote 13: « Belgian trader CCO saved CAR's year in diamond exports », Africa Intelligence, 06/01/2021.

4. LIMITATIONS OF THE STUDY

It is noteworthy that the data collected by phone interview – particularly the quantitative data – cannot be as accurate as the data collected directly on the ground during field visits, which is IPIS' standard modus operandi in times without Covid-19. Some care is therefore needed when interpreting the results of the data analysis. Future field visits by IPIS will help to determine potential long-lasting effects of the Covid-19 pandemic on the mining sector in the study area.

Another shortcoming concerns the representativeness of the 95 mining sites surveyed for this study. As was the case with the previous IPIS publications on the impact of Covid-19 on the mining sector, the 95 mining sites selected for this study are those for which IPIS received answers by key informants on sites during the different rounds of phone surveys. Therefore, the selection of the mines could not result from a sampling strategy that aimed to be representative of the artisanal mining sector in Western Central African Republic. We hence cannot claim that the 95 sites used for this study are representative of the mining sector in Western CAR, and consequently, to what extent our findings apply to this whole area. That being said, as data from this area is rare, this study does provide a unique insight into the short and medium-term impacts of the Covid-19 pandemic on the mining sector in Western CAR.

5. CONCLUDING REMARKS

The Covid-19 pandemic has been particularly harsh on the artisanal mining sector in the CAR, emphasizing existing trends since the 2013 crisis and the disruption of pre-financing networks in the diamond sector. Although it seems that gold prices undergo a progressive recovery, diamond prices remain low and an increasing number of workers may turn to the more attractive gold mining sector.

This study (data collection and analysis) was compiled before the general elections of December 2020 and the unsuccessful Coalition of Patriots for Change (CPC) rebel group attack on Bangui from Wednesday 13th January, 2021. It remains to be seen how the security situation will impact the recovering Central African Republic mineral sector in the coming months.

