



# THE IMPACT OF COVID-19 ON GOLD AND DIAMOND ARTISANAL MINES IN WESTERN CENTRAL AFRICAN REPUBLIC

# EDITORIAL

## **The impact of Covid-19 on gold and diamond artisanal mines in Western Central African Republic**

IPIS Insight

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Cover picture: Diamond miners on the mining site of Yémba (Abba).

All pictures from this report were taken by IPIS surveyors between April and August 2019.

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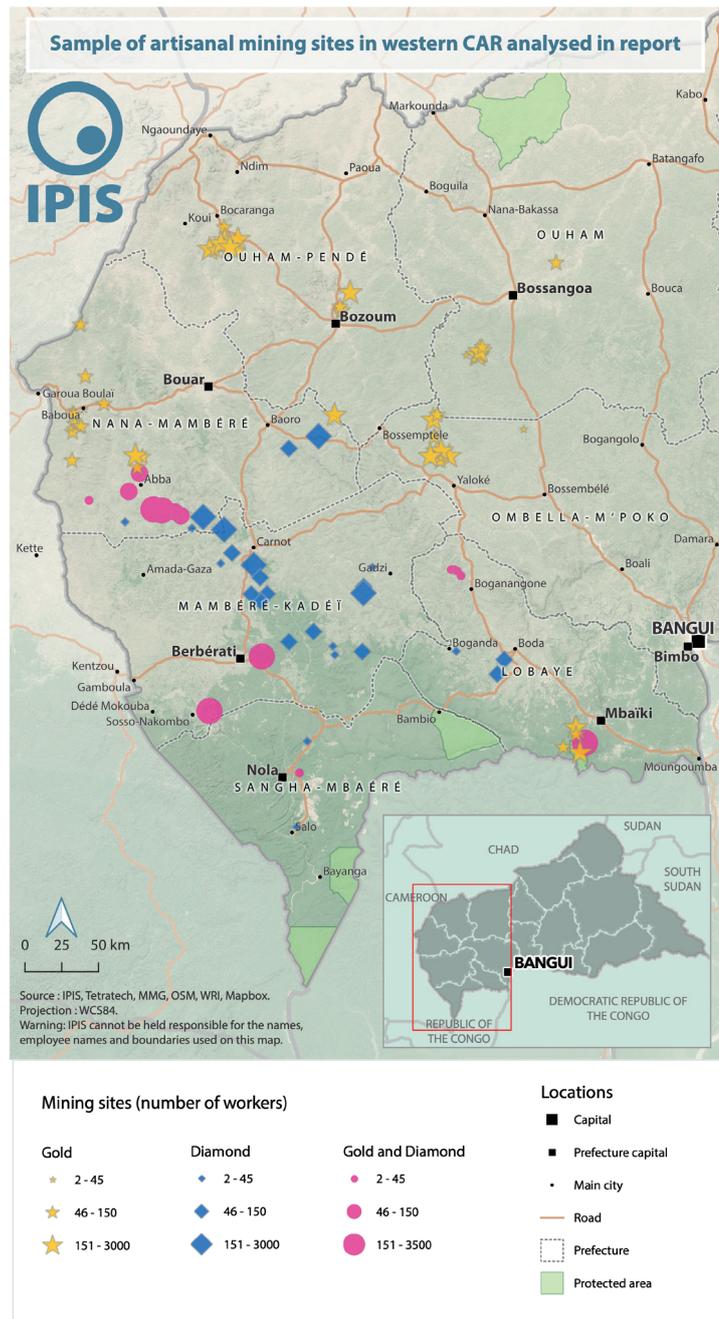
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# 1. INTRODUCTION

The artisanal mining sector in the Central African Republic (CAR) is well known for its difficult working conditions and its poor access to health and social care<sup>1</sup>. This study aims to provide an insight into the socio-economic impact of the Covid-19 pandemic on artisanal and small-scale gold and diamond mining in the west of the CAR. In May 2020, IPIS teams in Bangui conducted a series of phone interviews targeting key informants<sup>2</sup> covering 105 gold and diamond mines to collect information on minerals production, prices and illegal taxation. Out of the 105 mining sites surveyed, 60 are gold mining sites, 26 are diamond mining sites and 19 sites produce both gold and diamonds. To assess the impact of the Covid-19 pandemic, this data is compared with data collected by IPIS in 2019 on the same 105 mines in western CAR.<sup>3</sup>

This report provides some insight on the current socio-economic situation of the 105 mining sites surveyed in May 2020. However, the limited geographical scope – all the sites are located in the western part of CAR – and particular methodology of this study – interviews over the phone with key informants instead of site visit by trained enumerators – does not allow us to extrapolate our findings to the rest of the country.

Out of 322 mining sites visited by IPIS team in April-July 2019 in CAR, the 105 mining sites selected for this study are those for which we received answers by on site key informants during the 4 weeks of phone surveys. Therefore, the current report is a snapshot of the situation of those 105 mining sites and can only describe short-term trends. IPIS cannot assert with confidence that the changes observed since IPIS' 2019 study are a direct consequence of COVID-19 in CAR as some trends may also be initiated by other external factors, such as the security situation or seasonality. More research is currently conducted by IPIS to verify the significance of these trends and to assess the longer-term impact of the pandemic.



1 « The underlying health characteristics of ASM communities may mean that they are likely to be disproportionately impacted by the crisis. » Levin Sources, “Six reasons why Covid-19 response planning should prioritize ASM communities”, 21st April 2020, available at: <https://www.levinsources.com/knowledge-centre/insights/covid19-response-planning-prioritise-asm-communities>

2 The key informants were selected from a list of informants that IPIS has gathered during the mapping of 322 ASM mines in western CAR in 2019 (A. Jaillon, G. de Brier, Cartographie des sites miniers artisanaux dans l’ouest de la Centrafrique, IPIS, November 2019).

3 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/>

## 1.1. SUMMARY OF FINDINGS

While there is no evidence for an overall increase in number of workers on the 105 mining sites surveyed, key informants report an increase in the number of children under 15 years old actively participating in the production of minerals since the outbreak of the pandemic. The median average increased from 10 children per site in 2019 to 15 children per site in 2020. This observation may be explained by the closing of schools as suggested by some of the key informants during the interviews.

Informants on 52 mines (50%, out of 105) reported both the presence of new workers and the diminution of the number of buyers since the beginning of the pandemic. Despite the overall diminution of the number of buyers frequenting the mining sites, 41 sites (39%) reported the presence of new buyers, often local businessmen attracted by the decline of mineral prices.

The majority of informants reported a decrease of the gold price since the outbreak of Covid-19. The reported price for a gram of gold ore at the level of the mines went down from 62% to 53% of the international price of gold between April-July 2019 and May 2020. The reported price of diamond per carat has dropped by half since IPIS 2019 survey.

Using the production estimates reported by our informants, we could not find any evidence of a significant change in gold production between the baseline data and the 2020 data set. That said, several miners reported an increase in gold production because of the presence of new workers, while others observed a decrease in production due to the slowdown of investment (pre-financing) in mining activities.

Diamond production estimates collected in May 2020 seem higher than our baseline data collected in 2019. The median weekly production of diamond increased significantly. The augmentation of the number of workers as reported by the informants may account for an increase in production. However, given that diamond production is less predictable than gold and can vary from one week to another due to numerous factors, this trend needs to be corroborated by future research.

## 1.2. COVID-19 GOVERNMENTAL MEASURES

As of 9 July 2020, the number of Covid-19 confirmed cases in the CAR was 4,109. The number of confirmed deaths by COVID-19 was 52. Most cases are registered in the Bangui urban area.<sup>4</sup>

According to the ACAPS #COVID19 Government Measures Dataset<sup>5</sup>, the CAR government implemented a total of 23 measures in order to reduce the propagation of the Covid-19 pandemic in the CAR. These measures fall into 4 categories: restrictions on movement (8), social distancing (7), public health (7) and governance and socio-economic measures (1). Table 1 presents the 8 measures that may have a direct impact on the artisanal gold and diamond production and trade.

Most of the measures reported in this table might have a negative impact on production and trade



*Some children are part of the 800 gold workers reported on the site of Moundji 1, near Bocaranga.*

4 UNICEF, CAR COVID-19 Situation Report No. 5, 1—15 June 2020, available at: <https://reliefweb.int/sites/reliefweb.int/files/resources/UNICEF%20Central%20African%20Republic%20COVID-19%20Situation%20Report%20No.%205%20for%20the%20period%201%20-%2015%20June%202020.pdf>; WHO Covid-19 Situation Report 171, 9 July 2020, available at [https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200709-covid-19-sitrep-171.pdf?sfvrsn=9aba7ec7\\_2](https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200709-covid-19-sitrep-171.pdf?sfvrsn=9aba7ec7_2)

5 <https://www.acaps.org/covid19-government-measures-dataset>

of artisanal minerals. Travel restrictions and border closure would most likely reduce cash availability and both formal and informal trade opportunities. Limitations in public gatherings and social distancing measures – if enforced on mining sites, which did not seem to be the case according to the respondents – could potentially limit production capacities of the artisanal sector. On the other hand, the closure of schools for an undetermined period could have the reverse impact as it might increase workforce and hence the production on ASM sites.

**Table 1: List of measures adopted by the CAR government with a potential impact on ASM production and trade**

Category	Measure	Comments	Date of implementation	Source	Link	Applicable at the time of writing (4 June 2020)
Movement restrictions	Domestic travel restrictions	Travel restriction on between Bangui and several main cities (Bouar, Berberati, Nola, Ngaoundaya; Paoula).	27/04/2020	Government — CAR	<a href="https://www.facebook.com/gouv.cf/photos/pb.2107181279521620.-2207520000..2619835311589545/?type=3&amp;theater">https://www.facebook.com/gouv.cf/photos/pb.2107181279521620.-2207520000..2619835311589545/?type=3&amp;theater</a>	Yes
Movement restrictions	Domestic travel restrictions	Travel restriction on several roads (Douar-Beloko; Berberati-Gamboula; Bocaranga-Ngaoundaye; Paoua-Ngaoundaye; Nola-Tantchi) for one month.	27/04/2020	Government — CAR	<a href="https://www.facebook.com/gouv.cf/photos/pb.2107181279521620.-2207520000..2619835311589545/?type=3&amp;theater">https://www.facebook.com/gouv.cf/photos/pb.2107181279521620.-2207520000..2619835311589545/?type=3&amp;theater</a>	Yes
Movement restrictions	Border closure	Borders are closed for 15 days. Exceptions: Central African citizens, diplomats, and NGOs.	27/03/2020	Ministry of Foreign Affairs — France	<a href="https://www.diplomatie.gouv.fr/fr/conseils-aux-voyageurs/conseils-par-pays-destination/republique-centrafricaine/">https://www.diplomatie.gouv.fr/fr/conseils-aux-voyageurs/conseils-par-pays-destination/republique-centrafricaine/</a>	Yes
Social distancing	Schools closure	All schools are closed for 15 days.	27/03/2020	Government — CAR	<a href="https://www.facebook.com/gouv.cf/photos/pcb.2594650120774731/2594649900774739/?type=3&amp;theater">https://www.facebook.com/gouv.cf/photos/pcb.2594650120774731/2594649900774739/?type=3&amp;theater</a>	Yes
Social distancing	Limit public gatherings	Bars, clubs, restaurants, cafes, and refreshment stalls are closed for 15 days.	26/03/2020	Government — CAR	<a href="https://www.facebook.com/gouv.cf/photos/pcb.2594650120774731/2594650040774739/?type=3&amp;theater">https://www.facebook.com/gouv.cf/photos/pcb.2594650120774731/2594650040774739/?type=3&amp;theater</a>	Yes
Social distancing	Limit public gatherings	Gathering of more than 15 people are forbidden.	26/03/2020	Government — CAR	<a href="https://www.facebook.com/gouv.cf/photos/pcb.2594650120774731/2594650040774739/?type=3&amp;theater">https://www.facebook.com/gouv.cf/photos/pcb.2594650120774731/2594650040774739/?type=3&amp;theater</a>	Yes
Movement restrictions	Domestic travel restrictions	Travels between Bangui and other provincial cities are restricted.	26/03/2020	Government — CAR	<a href="https://www.facebook.com/gouv.cf/photos/pcb.2594650120774731/2594650040774739/?type=3&amp;theater">https://www.facebook.com/gouv.cf/photos/pcb.2594650120774731/2594650040774739/?type=3&amp;theater</a>	Yes
Social distancing	Limit public gatherings	Social distancing obligation of 1m between people.	13/03/2020	Government — CAR	<a href="https://www.centrafricque-presse.info/article/13898/rca-covid-19-message-a-la-nation-de-son-excellence-le-professeur-faustin-archange-touadera-president-de-la-republique-chef-de-letat">https://www.centrafricque-presse.info/article/13898/rca-covid-19-message-a-la-nation-de-son-excellence-le-professeur-faustin-archange-touadera-president-de-la-republique-chef-de-letat</a>	Yes

### 1.3. PRESENTATION OF THE DATASETS

This report builds on two datasets collected by IPIS in western CAR. The most recent dataset is composed of 105 completed questionnaires – one questionnaire per mining site – mixing quantitative and qualitative questions. IPIS’ enumerators in CAR have gathered this data over phone interviews with key informants in May 2020.

The questionnaire includes questions on the number of workers (men, women, children), the type of mineral produced and the price at the level of the ASM mine (per gram or carat), an estimation of weekly production (based on the previous week), the presence of new workers and new buyers compared to before the pandemic, the impact of Covid-19 measures on production and prices as perceived by the informants, the presence of armed groups and their type of interference (illegal taxation, looting, forced labor, monopoly on certain goods, etc.) as well as the prevalence of recent violent incidents on ASM mines.

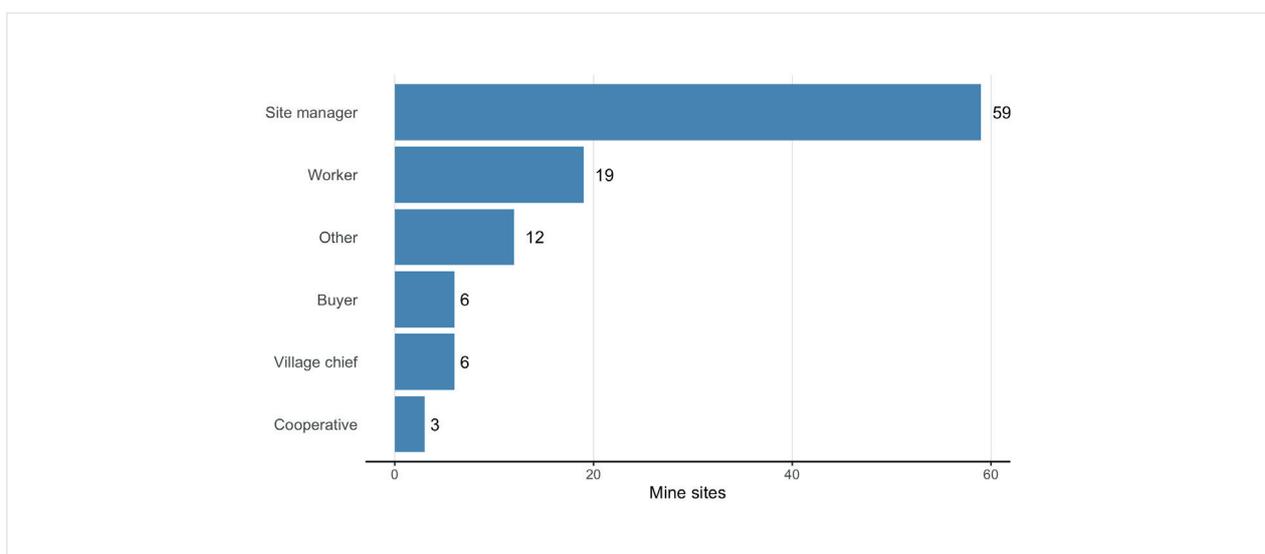
Between April and July 2019, IPIS collected data from 322 mines in western CAR. The questionnaire included both observations by the surveyors and interviews with different actors<sup>6</sup>. To allow comparisons with the data collected in May 2020 on 105 mine sites, we selected from the 2019 dataset the same set of 105 mine sites, which therefore represents our baseline for this study.

## 2. DATA ANALYSIS

The information provided in this report was collected by phone communication with key informants on 105 mining sites in western CAR (see figure 1). Out of the 105 mining sites surveyed, 60 are gold mining sites, 26 are diamond mining sites and 19 sites produce both gold and diamonds.

Most of the key informants were site managers ('chef de chantier' or 'chef de site', 59 mines), workers ('artisan minier', 19 mines), village chiefs (6 mines), formal ('collecteur') or informal ('financeur') buyers (6 mines), members of a cooperative (3 mines) or other actors (12 mines).

**Figure 1: Occupation of key informants**



6 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/>

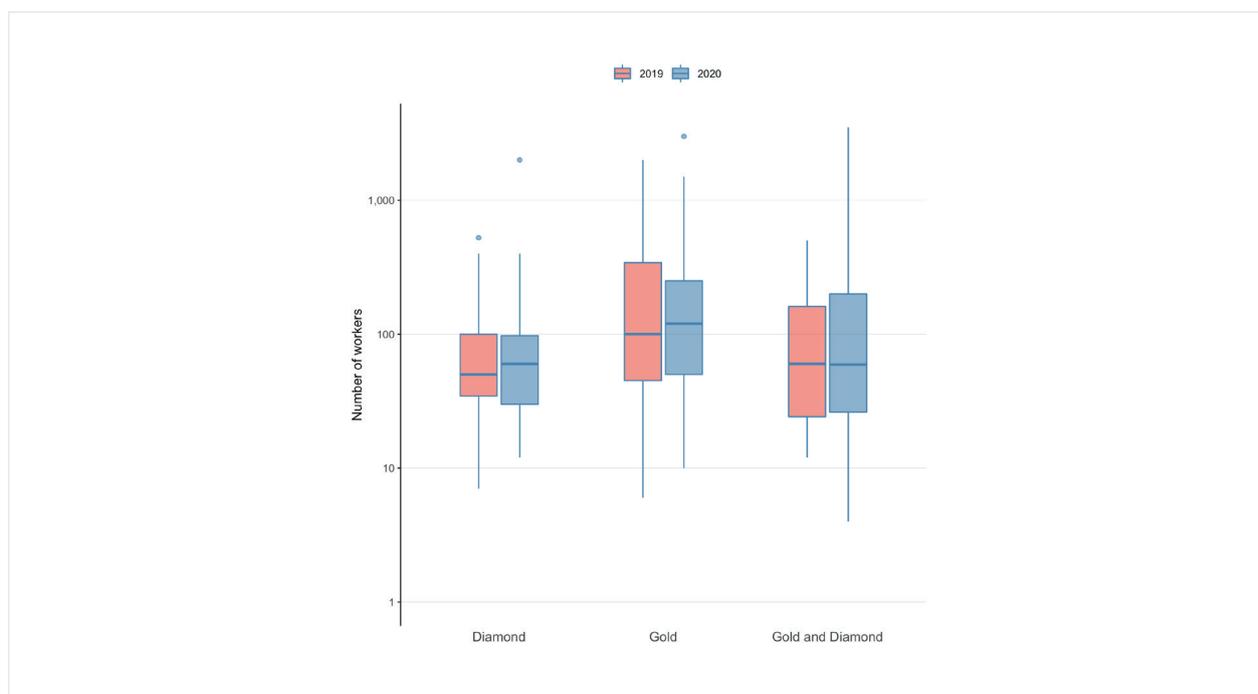
## 2.1. EVOLUTION OF THE NUMBER OF WORKERS

The 105 mines surveyed in May 2020 account for 33% of the total number of mines visited in 2019 and 42% of the number of workers reported in the 2019 dataset. A higher proportion of workers compared to mining sites could be explained by the fact that it was easier for IPIS' enumerators to reach out to key informants over the phone on sites with higher number of workers rather than on small mining sites, which are often more isolated.

On average (median) the informants reported 70 workers per mine site, including 20 women and 15 children under the age of 15<sup>7</sup> who were actively participating in the production. Women and children were present in 91 and 90 sites respectively, i.e. 86% of the mining sites. The total number of workers – male, female and children – did not significantly increase<sup>8</sup> between April-July 2019 and May 2020 (median average from 66 to 70 workers per site;  $p = 0.49$ , which is above our significance level of 0.05).

On average (median), gold mining sites surveyed in 2020 had more workers than diamond mines or mines with a mix of gold and diamonds (see figure 2 below).

**Figure 2: Evolution of the number of workers by minerals between 2019 and 2020**



The number of female workers was similar between 2019 and 2020 (median average of about 20 women per site). In CAR, women have a long history of being involved in mining activities. This is particularly true for gold mining.<sup>9</sup>

7 In this study, investigators were asked to assess the presence and number of children under 15 years of age who were actively involved in production (digging, crushing, washing, transporting minerals or processing waste). The survey did not address the issue of child labor between the ages of 15 and 18, partly because it is difficult to assess the age of a child over 15 visually, and partly because 15 years is the age legally allowed for admission to employment by the International Labor Organization. See: International Labor Organization, Convention 138 on Minimum Age for Admission to Employment, 1973, Articles 1 and 3.

8 We used the Wilcoxon signed-rank test (statistical test) throughout the report to determine whether the difference observed in workers number, selling price and production of each mineral is statistically significant between 2019 and 2020 datasets (paired samples and significance level at  $p < 0.05$ ).

9 IPIS -DIIS, Central African Republic: Conflict Mapping, Antwerp, September 2018, p. 86.

« Sur ce site, les femmes travaillent beaucoup et parfois jouent le rôle des motopompes. Elles traitent les produits pendant le lavage et sont le plus souvent accompagnée de leurs enfants. »<sup>10</sup>

Gold mining on diamond sites is often seen as a side activity, mostly undertaken by women, and which can serve as a complementary source of revenue in times of needs.<sup>11</sup>

« L'effectif des femmes a augmenté récemment [sur ce site diamantifère] puisqu'elles lavent les graviers des trous afin de récupérer l'or. »<sup>12</sup>

The informants reported the presence of children in 90 sites (i.e. 86%, see table 2), with more children working in gold mining sites than in diamond mining sites.

**Table 2: Number of children under 15 years of age actively participating in the production of minerals**

	Number of sites	Number of children (median)
Gold	57	18
Diamond	20	7.5
Gold and diamond	13	10
Total	90	15

The number of children under 15 years old involved in the production significantly increased ( $p = 0.02$ ) from a median average of 10 children per site in 2019 to 15 in 2020 on those 105 mining sites. This observation is likely to be the direct consequence of schools' closure in rural and mining areas<sup>13</sup>, although more research on the ground is needed to confirm this hypothesis.

Although we do not observe a significant increase in number of workers between the 2019 and 2020 datasets based on workers estimates provided by our informants, about half of the mining sites (52 sites) reported that new people started to work as diggers in the recent weeks due to the Covid-19 situation. On those sites, informants reported small shop owners who had to close their businesses, students and teachers who had to leave schools or women who joined their husbands in mining.



Children make up for a fourth of the workforce on the diamond mining site of Gbaina near Abba.

10 Chef de chantier on the mining site Mbélou. <https://www.ipisresearch.be/mapping/webmapping/carmine/v1/#6.311818333299996/14.810088333299973/11/4/1/>

11 A. Jaillon, G. de Brier, Cartographie des sites miniers artisanaux dans l'ouest de la Centrafrique, IPIS, November 2019.

12 Chef de village near the mining site Yémba. <https://www.ipisresearch.be/mapping/webmapping/carmine/v1/#5.049866666700012/15.688483333300042/11/4/1/>

13 When asked to specify who are the people who started mining activities due to the Covid-19 pandemic, the presence of "Children whose classes has been suspended" was mentioned on 27 sites.

## 2.2. REDUCTION OF THE NUMBER OF BUYERS

Almost half of the mining sites (52 sites out of 105) reported that less buyers were frequenting the site because of cash flow limitations, travel restrictions or renewed insecurity on the roads. This suggests that while the production continues the access to market and fair prices considerably shrinks.

*« La limitation des déplacements des sujets musulmans qui tiennent le monopole du commerce et qui payent les produits à bon prix a causé la chute du prix de revient des artisans. »<sup>14</sup>*

This observation is particularly acute for mining sites close to the border, that typically rely on foreign buyers.

*« Il se pose un grand problème de financement car les financeurs et assureurs sont généralement les Camerounais. Les activités en carrière [produisant des diamants] étant difficiles [faute de financement], les artisans émigrent vers les barrages [à la recherche de l'or]. »<sup>15</sup>*

Despite a lower number of buyers in a majority of mines (at least 51% of the mines), 41 mining sites (39%) reported that new opportunist buyers were frequenting the mines, citing for example local businessmen attracted by the diminution of the price for gold. This observation illustrates that the Covid-19 pandemic may present an opportunity for some people, although most probably in the short-term only.

The mining sites for which we observe a decrease in number of established buyers may reflect the trend that traditional pre-financing networks (see box 1) are likely to be disrupted and replaced by less embedded buying relationships formed in what is a temporary “buyers’ market”. In the latter, short-term wins and cherry-picking are likely to prevail. This temporary market would have a negative impact on the medium-term viability and productivity of ASM operations as embedded capital which typically circulates up and down the supply chain is replaced by a “quick win” mentality.<sup>16</sup>

The diminution of the number of established buyers who used to engage in pre-financing activities might have a long-term impact on production.



*Women are carrying minerals from the pit to the washing area on the gold mining site of Lima near Bocaranga.*

14 Artisan minier on Ngouma mining site. <https://www.ipisresearch.be/mapping/webmapping/carmine/v1/#3.7083249999999737/17.760591666700066/11/4/1/>

15 Chef de chantier on the mining site Kangabé. <https://www.ipisresearch.be/mapping/webmapping/carmine/v1/#6.788355222103135/15.713164098391985/11/4/1/>

16 «Liquidity crunches will limit the medium-term viability of ASM production and jobs.» Levin Sources, “Six reasons why Covid-19 response planning should prioritize ASM communities”, 21st April 2020, available at: <https://www.levinresources.com/knowledge-centre/insights/covid19-response-planning-prioritise-asm-communities>

« Le manque de financement a beaucoup affecté les activités minières. Certains acheteurs qui finançaient les artisans, refusent de continuer, car ils ne reçoivent plus les subventions des bureaux d'achat faute d'exportation. »<sup>17</sup>

### The importance of pre-financing in ASM in CAR

The IPIS 2019 mapping of ASM in western CAR<sup>18</sup> demonstrated to what extent ASM production is dependent on pre-financing. This is especially true for the diamond sector. Diamond mining is a labor-intensive activity that entails long exploration and preparation phases to reach a mineralized gravel layer. It offers no guarantee of success, even after months of hard work. Before the 2013 conflict, collectors from the main Bangui-based diamond buying houses acted as funders at several mines throughout the country in exchange for priority purchasing rights over the sale of minerals. This allowed them to spread risks and gains over several teams of miners across several sites.

Gold mining, unlike diamond mining, is less haphazard and is sold at a more predictable price. Although ASGM requires the same level of investment in terms of labor and equipment as diamond sites, gold sites make it possible to earn smaller sums more regularly. The pre-financing networks do exist, but on a smaller scale and with greater predictability on the potential production of a site.

## 2.3. GOLD PRICES

IPIS collected data on gold selling prices in April – July 2019 and May 2020 for 72 mining sites. Prices for a gram of gold ore at the mining site in 2019 was about 15,000 XAF<sup>19</sup> (or 25.64 USD with the exchange rate as of June 2019). This represented 62% of the international market price for one gram of gold (41.54 USD per gram as of 14 May 2019)<sup>20</sup>.

Prices for a gram of gold ore at the 72 mining sites in 2020 is about 17,000 XAF (or 28.73 USD with the 30-days average exchange rate as of June 2020). This corresponds to 53% of the international market price for one gram of gold (54.40 USD per gram as of 1<sup>st</sup> of June 2020)<sup>21</sup>.

While the median price increased significantly from 15,000 XAF to 17,000 XAF per gram between the 2019 and 2020 datasets ( $p = 0.003$ ), due to the even sharper increase at the international market, there was a relative decrease of the gold price. The price decreased from 62% in 2019 to 53% in 2020 of the international market price. Also reports from the field mentioned a diminution of gold price since the beginning of the Covid-19 pandemic.

17 Chef de chantier on the mining site Danabondo. <https://www.ipisresearch.be/mapping/webmapping/carmine/v1/#5.396868333299977/15.171564999999987/11/4/1/>

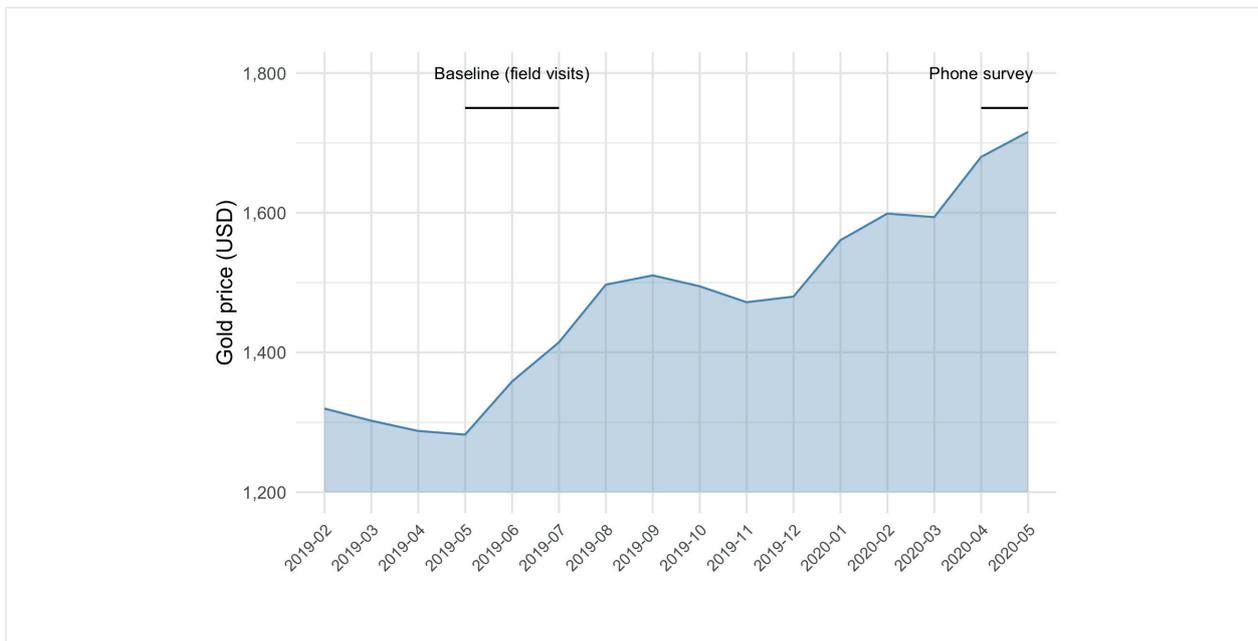
18 A. Jaillon, G. de Brier, Cartographie des sites miniers artisanaux dans l'ouest de la Centrafrique, IPIS, November 2019. Available at: <https://ipisresearch.be/publication/mapping-artisanal-mining-sites-western-central-african-republic/>

19 Median price reported in 2019 on the 105 sites surveyed in 2020.

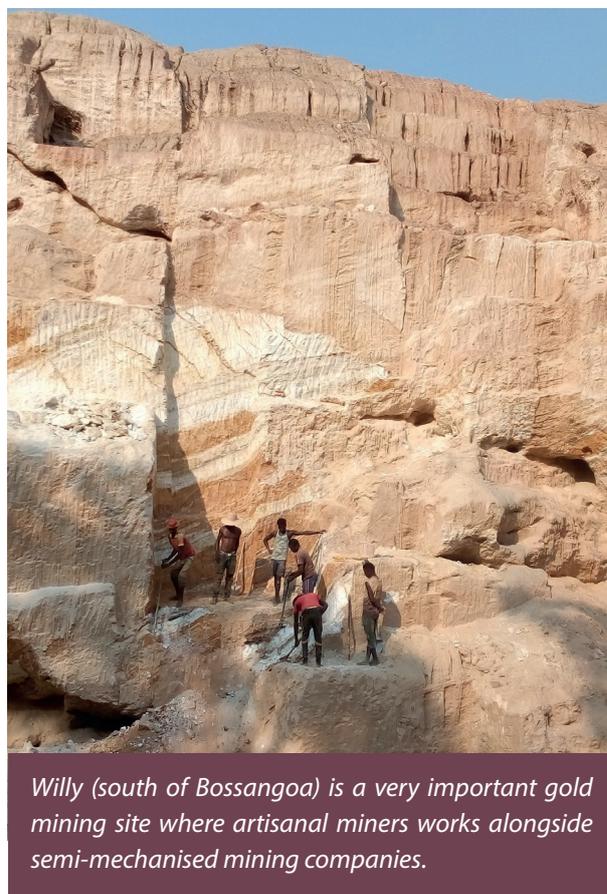
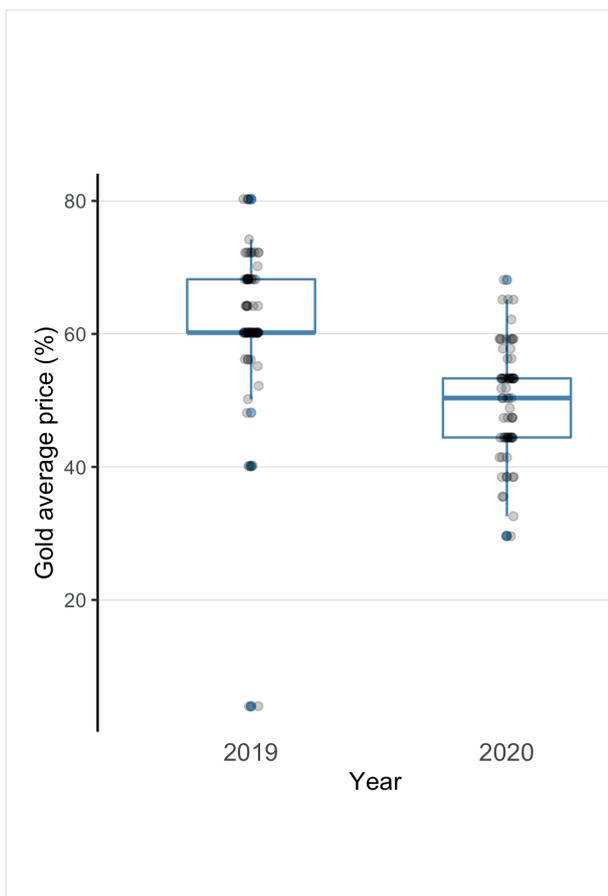
20 A. Jaillon, G. de Brier, Cartographie des sites miniers artisanaux dans l'ouest de la Centrafrique, IPIS, November 2019, p. 34. Available at: <https://ipisresearch.be/publication/mapping-artisanal-mining-sites-western-central-african-republic/>

21 One ounce of gold is equivalent to 31.10347 grams. On June 1st, 2020, the 50-day moving average price per ounce of gold was estimated at USD 1,692.11, or USD 54.40 per gram. Source: <https://or.fr/cours/or/usd>

**Figure 3: Evolution of the price of one ounce of gold in USD with data collection timeframe for 2019 and 2020<sup>22</sup>**



**Figure 4: Comparison of the price of one gram of gold ore (XAF) at the mining sites surveyed in 2019 and 2020. The gold prices are expressed as a percentage of the value of one ounce of gold on the international market (N = 72 sites).**



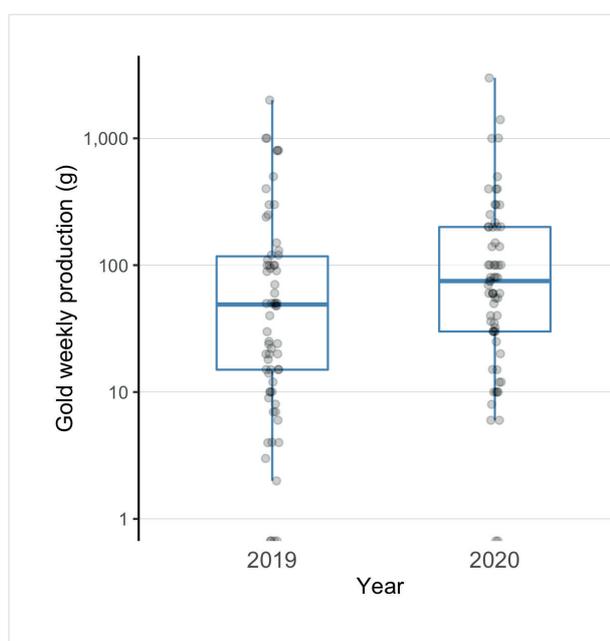
*Willy (south of Bossangoa) is a very important gold mining site where artisanal miners work alongside semi-mechanised mining companies.*

<sup>22</sup> Source: <https://goldprice.org>

## 2.4. GOLD PRODUCTION

The weekly production<sup>23</sup> was estimated at 66 gold mining sites both in the period of April-July 2019 and in May 2020. Although the comparison between the two datasets shows a slight increase in weekly gold production (median average per site of 44.0 grams in 2019 and 72.5 grams in 2020), we cannot conclude with high confidence that this difference is statistically significant ( $p = 0.10$ ). However, it is noteworthy that several interviewees reported an increase in gold production since the outbreak of the pandemic.

**Figure 5: Comparison of the weekly production of gold (in gram) on mining sites surveyed in 2019 and 2020 (N = 66 mine sites). The gold weekly production is plotted with a logarithmic scale.**



« Ces derniers temps, le site a reçu beaucoup de personnes (hommes, femmes et enfants) qui se lancent dans les activités artisanales. Les grands commerçants qui se trouvent sur les chantiers participent à la production en assurant quelques chefs de chantier et chefs de puits. »<sup>24</sup>

According to some of the respondents, more people are currently active on the mining sites in order to compensate for the suspension of other activities due to the Covid-19 pandemic. Unfortunately, the lack of potential buyers and the increase of the production might reduce the potential revenue per worker.

« L'or est disponible en quantité mais les revenus ne suivent pas. »<sup>25</sup>

## 2.5. DIAMOND PRICES

IPIS collected information on diamond prices both in 2019 and 2020 on 35 mining sites. The median diamond price reported on sites in May 2020 was 90,000 XAF per carat whereas the median diamond price reported in April – July 2019 on the same sites was 180,000 XAF per carat. The price of diamonds per carat has halved in the last year on these 35 mines.

It is likely that this significant decrease ( $p < 0.001$ ) has recently occurred due to the absence of diamond buyers and investors. This trend was observed more generally on the international market for rough

<sup>23</sup> The weekly production is estimated by questioning the production the week preceding the survey. Although at first glance, the production for the week preceding the survey does not necessarily reflect an average of a site's weekly production over the year, experience shows that this is the most reliable method for estimating production at a large number of sites. Indeed, the production for the week preceding the survey is easy to obtain from site managers (provided that certain pitfalls are avoided in presenting the mission's objectives, which could lead to an overestimation or underestimation of production) and the accumulation of sites that had a good week and those that had a bad week makes it possible to obtain a reasonably reliable average.

<sup>24</sup> Chef de chantier on the gold mining site of Moundji Centre. <https://www.ipisresearch.be/mapping/webmapping/carmine/v1/#6.809184000000016/15.669693000000052/11/4/1/>

<sup>25</sup> Chef de chantier on Moboma mining site. <https://www.ipisresearch.be/mapping/webmapping/carmine/v1/#3.675169999999966/17.863953333300006/11/4/1/>

diamonds<sup>26</sup> and confirmed by a recent study from the Kimberley Process Civil Society Coalition (KPCSC)<sup>27</sup>.

*« Pour un carats de diamant payé auparavant à 100 000 FCFA, le prix est divisé par 2 [depuis la fermeture des frontières]. La production est dense pour favoriser le gagne-pain mais les revenus sont faibles. Certains acheteurs se contentent d'acheter des diamants à bas prix pour stocker en attendant la fin de la crise. »<sup>28</sup>*

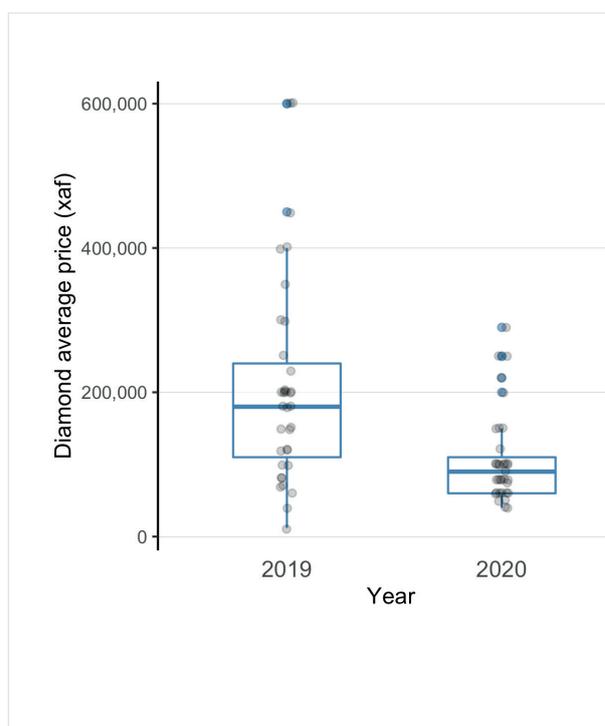
The production continues on some diamond mining sites with the support of local businessmen.

*« Les négociants qui arrivent fixent parfois le prix au carats trop bas, autour de 75 000 FCFA. Grâce aux petits commerçants les activités continuent puisqu'ils assurent les chefs de puits. »<sup>29</sup>*

**Figure 6: Comparison of the price of one carat of diamond (XAF) at the mining sites surveyed in 2019 and 2020 (N = 35 mine sites).**

## 2.6. DIAMOND PRODUCTION

While prices have dropped, the production of diamonds continued and even significantly increased ( $p = 0.04$ ). From 2019 to 2020, the median production estimated per site went from 0.6 carats to 2.8 carats on the 32 diamond sites where production was reported in both datasets. However, diamond production is less stable than gold production and hence, comparison between two time slots has many caveats. More monitoring of the same mining site is necessary to appreciate if this increase in production will continue over time or not.



26 As of July 4, 2020, the Zimnisky Global Rough Diamond Price Index shows a 12.7% contraction over 52-week change, as available at <http://www.paulzimnisky.com/roughdiamondindex>

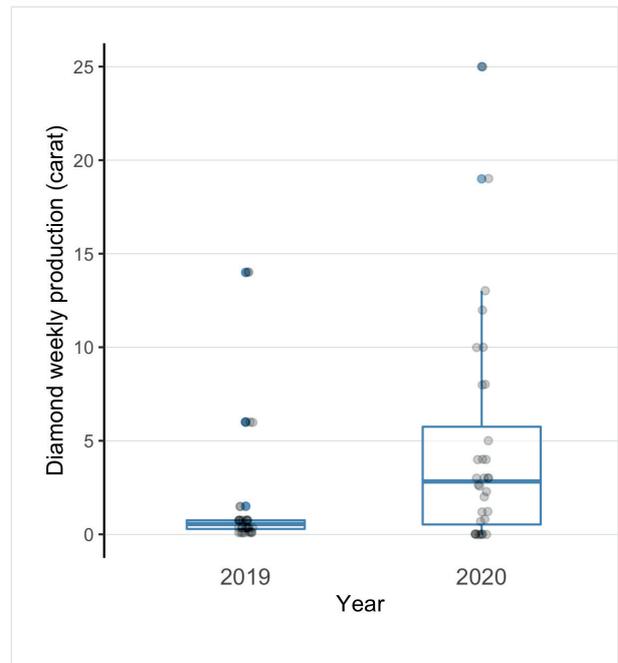
27 “Yet, what is particularly slackening operations is the fall in diamond prices and the disruption of trading routes. This is drying out of pre-financing arrangements by trader networks that no longer have the necessary cash flow. [...] Across the region, there are reports of opportunistic and criminal actors stepping into this void, luring desperate miners into exploitative sponsor deals that force them to sell production at drastically reduced prices.” Kimberley Process Civil Society Coalition, The impact of Covid-19 on African communities affected by diamond mining, KP CSC, June 2020, pp 7-8. Available at: <https://ipisresearch.be/publication/impact-covid-19-african-communities-affected-diamond-mining/>

28 Président de la jeunesse communale de Tedoa. <https://www.ipisresearch.be/mapping/webmapping/carmine/v1/#5.462613333299984/16.5015216667/11/4/1/>

29 Chef de chantier on Gbin-Mboussa mining site. <https://www.ipisresearch.be/mapping/webmapping/carmine/v1/#5.136106999999981/15.424519000000032/11/4/1/>

**Figure 7: Comparison of the weekly production of diamond on mining sites surveyed in 2019 and 2020 (N = 32 mining sites).**

Currently it is not possible to know if this increase is linked in any way to the Covid-19 pandemic and the reported influx of temporary workers. It is yet to be seen if this increase in production will continue despite the reduction of the number of buyers and pre-financing mechanisms due to the closure of state borders and travel limitations. IPIS will continue to monitor and to report on the evolution of production and prices in the coming months.



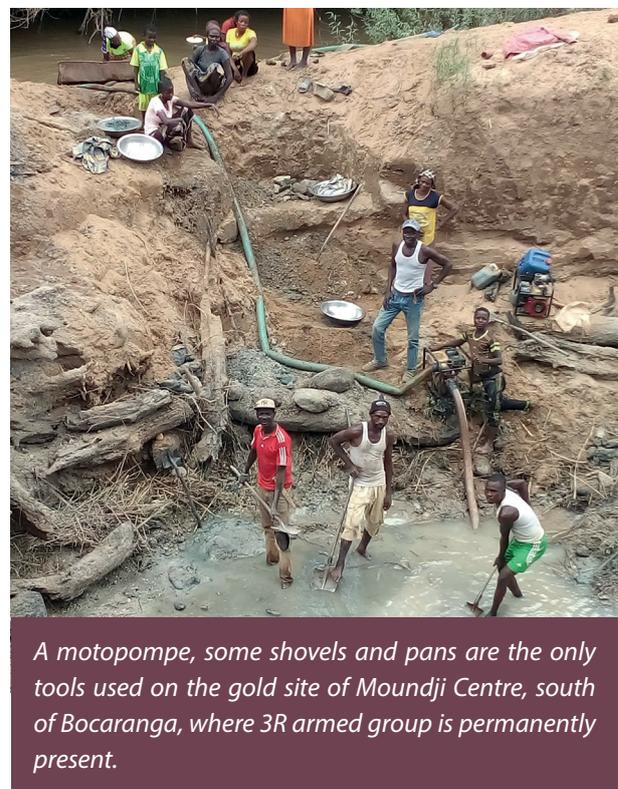
## 2.7. ARMED ACTORS ON SITE

Due to the limited scope of this study and its specific methodology, we will refrain from comparing the presence of armed actors on mining sites from 2019 to 2020. Any changes on armed group presence at a mining site between 2019 and 2020 can have numerous reasons and be subject to local dynamics not directly linked to the Covid-19 pandemic.

### 2.7.1. 3R

The 3R<sup>30</sup> armed group is reported being present on 20 mining sites of our dataset (out of 105 mining sites), including permanent presence in 8 mining sites and random visits in 12 other mines. In those 20 mining sites, several types of involvement were reported from illegal taxation of the production (6 mining sites), buying of minerals (6 sites), digging themselves (3 sites), pillaging (2 sites) or exercising a monopoly on certain goods (1 site). The informants reported recent acts of violence by the 3R on 6 mining sites.

*« La production [de ce] site est contrôlée par les 3R et c'est eux qui gagnent le plus de revenus. »<sup>31</sup>*



*A motopompe, some shovels and pans are the only tools used on the gold site of Moundji Centre, south of Bocaranga, where 3R armed group is permanently present.*

30 3R stands for "Retour, Réclamation, Réhabilitation".

31 Chef de chantier on the mining site Gomoye. <https://www.ipisresearch.be/mapping/webmapping/carmine/v1/#5.824471666699992/14.953825000000052/11/4/1/>

### 2.7.2. Anti-Balaka or auto-defense groups

Anti-Balaka or auto-defense groups are not always visible despite being present on some of the mining sites. Members of those groups might be present as workers, as they are part of the local community.

*« Les Anti-Balaka font partie de la communauté de creuseurs [sur ce site]. »<sup>32</sup>*

Anti-Balaka or auto-defense groups have been reported on 12 mining sites in 2020. They were reportedly involved in the illegal taxation of minerals on 2 mining sites while they were digging themselves in 10 mining sites. Recent acts of violence by these groups were reported only on one mining site.

*« La présence des autodéfenses [sur ce site] assure les artisans de leurs protection. Ces acteurs armés non étatique participent à la sécurisation du site en cas de problèmes. »<sup>33</sup>*

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32 Anonymous, key informant for the mining site of Gbehkara. <https://www.ipisresearch.be/mapping/webmapping/carmine/v1/#6.59997216330828/16.574812628555264/10.946419184785064/4/1/>

33 Président de la jeunesse on the mining site of Gbaina. <https://www.ipisresearch.be/mapping/webmapping/carmine/v1/#5.168813333299994/15.307080000000042/11/4/1/>

### 3. CONCLUSIONS

In May 2020, IPIS enumerators in Bangui conducted phone interviews with key informants covering a total of 105 mining sites in western CAR. The objective of this remote data collection was to obtain quantitative and qualitative information in an attempt to assess the impact of the Covid-19 pandemic on the artisanal gold and diamond sector in western CAR.

Out of the 105 mining sites surveyed, 60 are gold mining sites, 26 are diamond mining sites and 19 mining sites produce both gold and diamonds. While the number of workers did not significantly increase in comparison to 2019, the number of children under 15 years of age working on those sites significantly increased (from a median average of 10 to 15 children per mining site).

About 50% of the mining sites reported both the presence of new workers and the diminution of the number of buyers since the beginning of the pandemic. The presence of new workers, including a high proportion of children, may be explained by policy regulations implemented in a national effort to reduce the prevalence of Covid-19 cases such as the closure of small shops, especially in the food and beverage sector, and schools. The diminution of the number of buyers may be explained by travel restrictions and the closure of international borders to non-nationals. These hypotheses could not be verified in this study.

At the same time, 39% of the mining sites reported the presence of new buyers. They usually are local businessmen who are trying to benefit from the absence of international buyers and from the reduction of prices with the objective of stocking minerals to sell after the Covid-19 restrictions will be relaxed. While this might bring some short-term relief to the mining community, the longer-term effect of the involvement of local buyers to the mining sectors is yet to be analysed.

Some respondents described a diminution of the gold price at the mine level compared to the price as it was before the Covid-19 pandemic. The diamond price per carat dropped at the mine level since IPIS' 2019 study. Contrary to prices, both the production of gold and diamond seemed to have increased in our subset of sites between the 2019 and 2020 dataset, even though we cannot determine with certainty if this is linked to the most recent events.

IPIS will continue to monitor the situation at the mining sites in western CAR in the coming months in order to assess the longer-term consequences of the Covid-19 pandemic on the artisanal sector with the aim to publish an analytical report at the end of the summer. The suspected increase of the production paired with the diminution of prices might lead to another economic crisis for the artisanal mining sector in CAR and creates more opportunities for illicit traders and conflict actors to engage in a sector that is already mostly informal.

