



KEY FINDINGS OF RESEARCH ON THE ARTISANAL GOLD SECTOR IN THE CENTRAL AFRICAN REPUBLIC

BACKGROUND

The United States Agency for International Development (USAID) Artisanal Mining and Property Rights (AMPR) project addresses land and resource governance challenges in the artisanal and small-scale mining (ASM) sector, using a multidisciplinary approach and incorporating appropriate and applicable evidence and tools. AMPR began in 2018 and is implemented primarily in the Central African Republic (CAR) for an initial period of three years. While the project focuses on the Kimberley Process and diamond governance, Component 3 includes activities aimed at better understanding the growing artisanal gold sector in the country.

This brief summarizes key findings from research carried out in 2019, including a mapping and field survey of artisanal gold mining sites in western CAR conducted in collaboration with International Peace Information Service (IPIS). The IPIS study covered 322 sites, of which 201 were gold sites and 60 mined both gold and diamonds. In addition, the brief draws upon other sources, including an assessment by the non-governmental organization (NGO) RESOLVE on options for responsible sourcing in CAR's gold supply chain, a study on minerals smuggling conducted by AMPR and the Government of CAR in March 2019, and the annual report on the gold and diamond sector prepared by the CAR Ministry of Mines and Geology.

GOLD PRODUCTION LEVELS AND METHODS

Artisanal and small-scale gold mining (ASGM) occurs throughout CAR in 10 of 14 provinces. While it overlaps with many diamondiferous areas, ASGM is more widespread. Due to AMPR's scope and security considerations, the research only focused on western CAR, where armed group activity is

less prevalent than in the country's central and eastern regions. IPIS estimated that the research covered around 30% of CAR's active mine sites.



Figure 1: ASGM site in Nakoko, CAR

The average estimated weekly production at the 261 visited sites that produce gold was 35.7 kilograms. Based on previous research by the U.S. Geological Survey and United Nations Development Programme (UNDP)-UNICEF in 2018, IPIS extrapolated to a national level and estimated 5.7 tons of gold produced per year, assuming 717 gold-producing sites in the country. This figure is higher than the approximately 2 tons estimated by the 2018 UNDP-UNICEF study, which covered more sites in the east but did not conduct in-depth production data collection. By comparison, the country officially exported only 142 kilos in 2018, or around 2.5% of the estimated production.

Site characteristics varied widely, with an average of 10 pits or production units per site. Each pit has an average of 43 workers, and each site an average of 193 workers. Only 10% of pits are large (defined as having more than 50 workers). At least two sites had more than 3,000 workers each. These large sites skew the average number of workers; most sites have 77 workers or fewer, and most pits had 25 workers or fewer. Sites are located both in and along active rivers, as well as terrace deposits and underground mining targeting gold veins. Mining is mostly non-mechanized, with only 6.5% of sites using metal detectors and 1.5% of sites using hammer mills or other mechanized mineral extraction or processing equipment.



Figure 2: Women panning in Lima site, CAR

The number of people directly working in the visited gold mines was estimated at 45,000, around one-third of whom were women. However, women were present at 83% of sites visited. Extrapolating nationally, IPIS estimated that there are between 150,000 and 200,000 people working directly in the ASM (including diamonds) work force, fewer than the approximately 300,000 people estimated by UNDP-UNICEF in 2018. IPIS estimated that the average weekly earnings per worker were between \$9.45 and \$11.77,¹ not taking into consideration food allowances and other forms of pre-financing.

As part of its sub-contract with AMPR, IPIS designed an interactive web map² that visualizes and compiles all data from the field research, including pictures of each site.

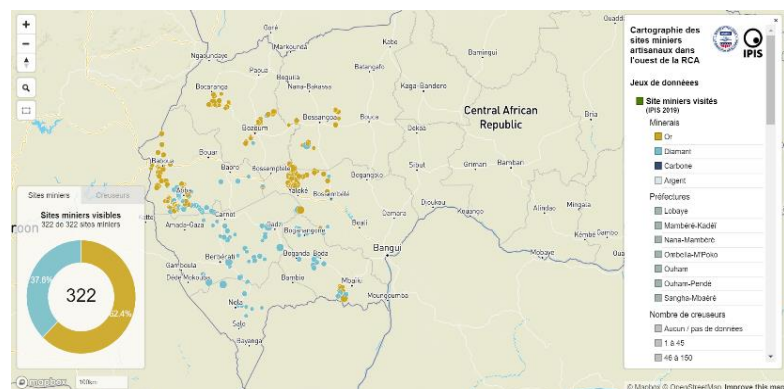


Figure 3: IPIS Interactive web map

¹ The conversion used between Central African CFA (XOF) and US Dollar (USD) was 585 CFA per USD.

² The map is available here: <https://www.ipisresearch.be/mapping/webmapping/carmine/v1/>.

SUPPLY CHAIN

The ASGM supply chain has a similar organization to the diamond supply chain. Teams of laborers earn shares of produced gold. These teams are also assisted by day laborers paid by the task (such as operating a water pump) or by their time. The pit manager (*chef de puits*) supervises the labor and is the liaison with the claim-holder (*chef de chantier*). The claim-holder is often pre-financed either by formal gold collectors or by other benefactors. If not the land-owner, they must also pay rent to landlords or village leaders. The formal supply chain involves collectors and buying houses (exporters). The informal supply chain involves freelance brokers and gold dealers, some located in neighboring countries and those who facilitate smuggling.

The per gram price paid at the mine level was on average 15,000 CFA (\$26.76), representing around 65% of the world market price of \$41 for pure gold at the time of research, and significantly lower when compared to other parts of Africa where gold sells at 75–90% of the world market price.

However, for independent miners (those who are not pre-financed), the price earned per gram could be higher, around 20,000 CFA (\$34.18).

In 2019, 21 entities exported a total of 359 kilos of gold, representing a 650% increase over average exports between 2010–2012 before the CAR crisis began. The 2019 exports also represent a 300% increase compared to 2017 and 2018, showing an upward trend. However, they still represent a small fraction (less than 5%) of likely production. In addition, 3 of the 21 entities (Adama Swiss Refinery, Kotto Mines, and Treck Mining) represent over 75% of legal exports, and many of the remaining entities exported less than a kilo, a sign of under-reporting. The CAR government earned 247 million CFA (\$420,000) in tax revenue from legal gold exports compared with 209 million CFA (\$360,000) from diamonds, which have historically dominated mining income.

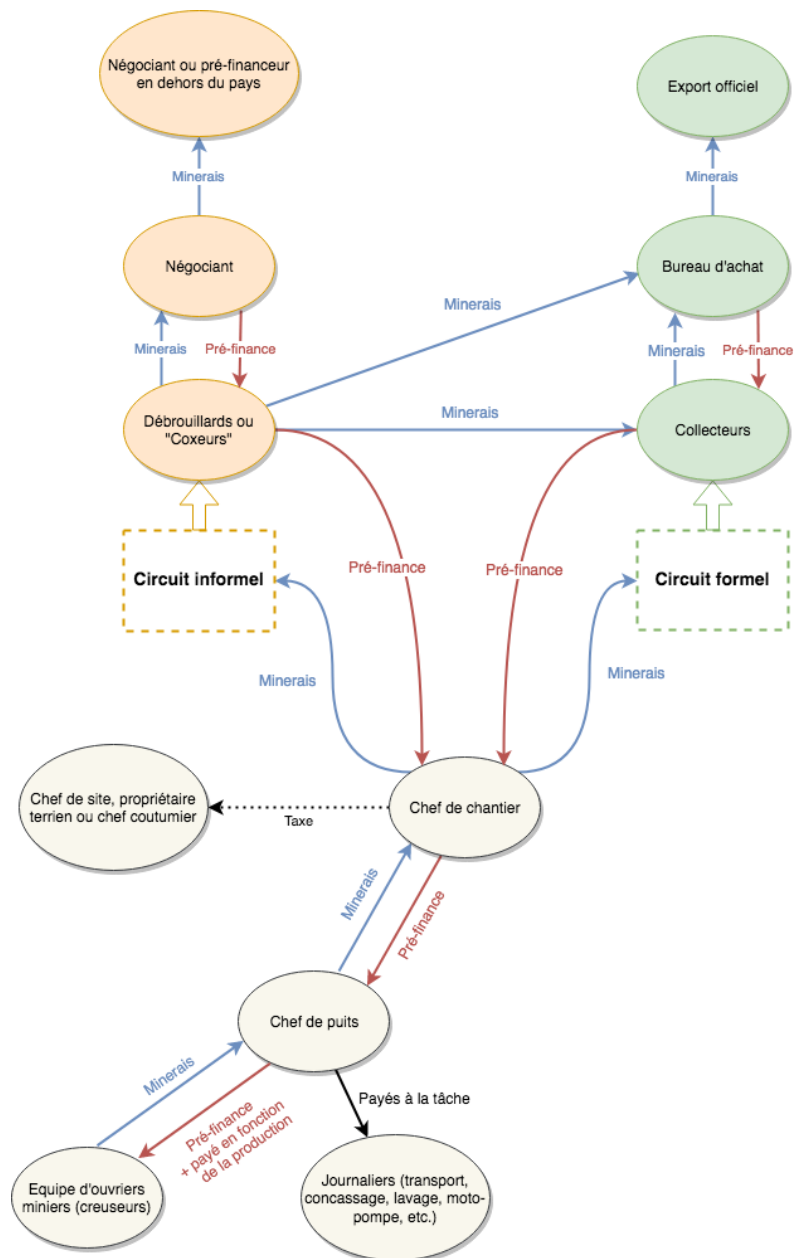


Figure 4: Diagram of gold supply chain (Source: IPIS)

SMUGGLING AND ILLEGALITY



Figure 5: Gold powder and nuggets in Gbonkolo, CAR

CAR's ASGM sector remains largely informal and marked by fraud and criminal activity. Comparing site locations to official licensing records, IPIS found none that had an artisanal mining license and only 20 that had a semi-mechanized artisanal mining permit (PEASM).³ A significant portion (118 sites, or 36%) were located on an industrial research permit, where artisanal mining is not authorized. Nearly 50% were located outside of any concession area. With the exception of semi-mechanized artisanal permit-holders, often cooperatives and foreign mining companies, the vast majority are mining illegally.

As noted above, legal exports represent less than 5% of estimated actual production. Some legal exporters likely declare only a small fraction of actual exports. For example, Chinese companies like Thien Pao provide cover for Chinese freelance miners from Guangdong who operate on multiple semi-mechanized artisanal sites with heavy machinery. The gold is sold through Cameroonian networks; Thien Pao only recorded 1.3 kilos of gold exported from Bangui in 2019.

Cameroon is the major destination for gold produced in western CAR, with gold from 116 sites moving over their border, compared to gold from 67 sites moving to Bangui. The price of gold in Cameroon is higher than in Bangui, according to the study. At the time of research gold was between 20,000 and 23,000 CFA in Bangui (\$34 and \$39). At Garoua-Boulay on the Cameroonian-CAR border, gold was 25,000 CFA (\$42.73), which is at or even higher than the world market price, pointing to the possibility of gold being used for money laundering or illegal capital transfers. Central African traders complained about illegal brokers from Cameroon who offered 21,500 CFA per gram as opposed to the maximum of 20,000 CFA per gram they could offer and still make a profit.

Besides Cameroon, Chad was mentioned as a destination for gold from western CAR at 12 surveyed sites. Because the study did not cover gold production in areas controlled by armed groups in eastern and northern CAR, other likely destinations such as Sudan were not captured.

ARMED GROUPS AND SECURITY

Despite their isolation, nearly 50% of surveyed sites were visited by a government entity, generally the anti-fraud paramilitary brigade (*l'Unité Spéciale Anti-Fraude*, USAF). Around 15% of surveyed sites had informal tolls on access roads controlled by government security forces. Self-defense groups were present on around 10% of sites, generally armed with rudimentary hunting rifles. Government security forces were more present on or near concessions given to Chinese companies, who reportedly pay them to provide security, and sometimes also hire self-defense groups.

The study's zone was relatively untouched by unconventional armed groups, with the exception of the Return, Reclamation, Rehabilitation (3R) group, which was present on 33 surveyed sites. The group was involved in extortion and illegal taxation, raising around 83,159 CFA (\$142) per site per week from miners. In addition, the group taxed illegal brokers and smugglers a weekly access fee ranging from CFA 18,210 to CFA 33,385 (\$30 to \$55). In some cases, the group was reportedly

³ *Permis d'exploitation artisanale semi-mécanisée*, which is different from the *Autorisation d'exploitation artisanale*.

involved in the gold supply chain, such as the Besson site north of Baboua. At this site, in addition to a \$1 tax per worker per week, all brokers were obliged to sell to “General” Siddiki Abbas at the low fixed price of 15,000 CFA per gram (\$25.64). This might also explain that some sites under 3R control north of Gamboula reported prices paid to miners as low as 10,000 CFA per gram (\$17). In another case, diggers said that a “Chadian rebel” group allied with 3R operated a gold ore mill at the Moundji center site near Bocaranga, where they also supplied mercury for amalgamation.

The facilitation of smuggling and illegal activity was reported not just by 3R but also government officials and security forces. Politically exposed persons (such as members of parliament and mayors) were reportedly heading some mining cooperatives. In addition, these mining cooperatives were often used as covers to work with foreign partners, including Chinese entities, since cooperatives have fewer fiscal obligations than locally registered companies, despite being reserved for local artisanal miners according to Central African mining law.

COOPERATIVES AND FOREIGN MINING COMPANIES

Of the 46 sites visited with nearby foreign companies or cooperatives, 8 were in conflict with non-mechanized artisanal miners. In some cases, artisanal miners have adapted to these semi-industrial actors, preferring to rewash tailings instead of investing time in manually extracting overburden. In other cases, the companies have used security forces to push back on encroachment by miners. In the case of the large site of Willy, the government accorded permits to two Chinese companies that pushed out the traditional operators. The increased use of PEASM may also be a way to avoid



Figure 7: Chinese operators at the Willy artisanal site

scrutiny by parliament, who by law must sign off on industrial mining research or exploitation permits.

Similar conflicts were reported in southwestern areas where dredges are used by Chinese operators, including the case of violence against these operators by young displaced miners. Many of these operators then export illegally, or partially illegally. IPIS estimated, for example, that the fuel costs alone for the company

Thien Pao were \$108,000 per week based on the number of heavy machines observed, but the market value of their legal gold exports in 2019 was around \$55,000.

CHILD LABOR, WORKPLACE SAFETY, AND ENVIRONMENTAL IMPACTS

Compared to diamond mining, child labor is more prevalent in CAR’s gold sector. Children below the age of 18 were observed on 85% of surveyed ASGM sites. Around 13% of gold sites reported children below the age of 15 working in the mines. When extrapolated, this means around 6,000 young children in CAR working in gold mining. The 2018 UNDP-UNICEF study estimated around 14,000 young children working in gold and diamond mining in CAR.



Figure 8: Women with small children at Nago site

Workplace safety is a concern in gold mining, especially when conducted in underground tunnels that can collapse. In the 12 months preceding the survey, 87 deaths occurred at visited sites, according to the IPIS research. More than 1,000 miners were injured on 116 sites in the same period. Tunneling was observed at 12% of sites.

In terms of environmental impacts, the use of mercury is still

uncommon, according to the research. Only three artisanal sites mentioned its utilization, and most were linked to outside actors such as Chadian rebel-backed dealers or Chinese companies. However, the impact of these few actors can be significant, given how they operate on a semi-industrial scale. Near Bozoum, for example, a scandal erupted in 2019 when a CAR laboratory, as part of a parliamentary enquiry, found that the river Ouham had mercury levels between 4 and 26 times higher than norms for fresh water. A view of these companies' operations on the river from space below shows the scale of their activity in less than a year, even though they are legally classified as artisanal.



Figure 9: Underground miner at Gbonkolo site



Figure 10: Satellite imagery from June 2018 (left) compared with June 2019 (right) showing impacts of mining on Ouham river

DUE DILIGENCE AND RESPONSIBLE SOURCING

As part of an assessment by RESOLVE conducted for AMPR, opportunities and constraints for supply chain due diligence were examined in CAR's gold sector. Due diligence is a framework that calls upon companies to make informed, responsible choices about their sources and suppliers. The goal of due diligence is to help companies create supply chains that respect human rights, do not contribute to conflict, and comply with international and national laws. The Organisation for

Economic Co-operation and Development (OECD) Due Diligence Guidelines spells out how to conduct due diligence, including the identification of serious risks in Annex II of the Guidelines.

Specific risk factors documented in the gold sector in CAR include worst forms of child labor (WFCL) in mining and involvement of non-state armed groups in minerals production, trade, and illegal taxation. This would make CAR as a whole a Conflict-Affected High-Risk Area (CAHRA) under OECD Due Diligence Guidelines. However, the diagnostic found that CAR has an opportunity to differentiate gold from areas not impacted by armed groups or other risks. While buyers will look at countries and regions as a whole to inform risk assessment, due diligence is also linked to specific supply chains, and would not prohibit sourcing from specific mines.

For more specific steps and guidance, cooperatives may also use CRAFT, a standard that describes how cooperatives can implement and document conformance with OECD Guidance. RESOLVE conducted a training for CAR stakeholders on CRAFT in January 2020, as well as the overall OECD Due Diligence Framework. CAR is currently preparing to implement the Regional Certification Mechanism (RCM) of the International Conference of the Great Lakes Region (ICGLR), a mechanism to implement the OECD Due Diligence Guidelines. The training and market assessment by RESOLVE helped identify actions to help bring CAR in alignment with these international norms.

RECOMMENDATIONS AND NEXT STEPS

The mandate of AMPR under Component 3 is to contribute to understanding the CAR ASGM sector. All activities foreseen under this component have now been implemented, the results of which are summarized in this brief. Despite not having new activities planned under this component, AMPR continues to advise the CAR government on its overall artisanal mining sector, including ASGM. As part of the workshops conducted with the government on the research, a number of recommendations were identified by ASGM stakeholders.

These include continuing and institutionalizing the practice of mapping and collecting data on CAR's gold mining sites. In addition, the elaboration of an action plan or policy tailored to the realities of the gold sector was identified as a key action. Additional training on implementation of due diligence, including the CRAFT Code for mining cooperatives, was recommended. Updating CAR's legislation to include responsible sourcing was also identified as a key priority. Finally, participants urged increased action against smuggling and illegal activities.

In conclusion, the AMPR research helped shed more light on this growing sector and set the stage for action by the Government of CAR and its partners to formalize and address the many challenges and opportunities gold offers to the country and its mining communities.

SOURCES

- Alexandre Jaillon and Guillaume de Brier (2020). "*Mapping artisanal mining sites in the western Central African Republic.*" Publication prepared by IPIS for Tetra Tech / USAID.
- Jennifer Peyser (2020). "*CAR Market Readiness Assessment.*" Publication prepared by RESOLVE for Tetra Tech / USAID.
- Sebastian Pennes (2018). "*Diagnostic de l'exploitation minière et perspectives de développement socioéconomique en RCA à la lumière de la vision du régime minier en Afrique.*" Publication prepared by Levin Sources for UNDP-UNICEF.
- Terah De Jong (2019). "*Etude diagnostique sur la contrebande des diamants de la République centrafricaine.*" Publication prepared by Tetra Tech for USAID.
- Christian Olowi (2020). "*RAPPORT ANNUEL 2019 de la Direction des Données, de la Régulation et du Suivi de la Commercialisation.*" Report prepared for CAR Ministry of Mines and Geology.