

The DRC's Cobalt

Capturing the multiple stories, people and sites around cobalt mining in the former Katanga province in the Democratic Republic of Congo

By Hadassah Arian and Nathan Bushiru

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Pictures by Nathan Bushiru

Texts by Hadassah Arian

With the support of University of Antwerp,
Université de Lubumbashi, VLIR-UOS and FWO



Université
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In this photo essay photographer Nathan Bushiru and PhD-researcher Hadassah Arian have combined their work in documenting multiple facets of cobalt mining in Kolwezi, DRC.

Often Kolwezi, cobalt mining and people working in and around these sites are portrayed in a particular way in the international media – with a lot of focus on bad working conditions, children in the mines and the suffering people experience in the sector. Whereas these elements are present and very important to consider, with this project we want to show that this is only one part of a much more varied and complex story. In reality Kolwezi and cobalt mining contain many different elements, with different people and settings included. There is not one story, one site or one type of actor included – it is a multiplicity of people, places, and stories.

While pictures of children in the mines are now globally well-known through international media, other multi-layered elements and images of this environment are perhaps less well-known outside of the DRC. This includes various parts of the city, both inside and outside the sites, different types of interactions, materials, past and future elements. Through this project we hope to contribute to a more holistic understanding of cobalt mining practices in the DRC.

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In the South-Eastern part of the Democratic Republic of Congo, the gathering of copper and malachite has been a traditional activity of the Sanga people since around 1600. Those involved with mining are known to the Sanga as the ‘copper eaters of Katanga.’



The form and scale of pre-colonial mining were very different from activities today. Minerals were more easily accessible, found at superficial levels. While it was mainly men gathering the minerals, women did have an important role in the process. They would hold ceremonies, sing, and dance, in order to call the ancestors and spirits, to ensure that the mining activities would go well. Similar ceremonies are still being held today.

The minerals were mainly used to make jewelry and other trading goods, including what is called the 'Croisette du Katanga.' This object became a symbol of Katangese identity, showing richness and force. It is included today as part of a statue in one of the center points of Kolwezi: Mwangeji.



During the years under Belgian colonial rule (1908-1960), the Katanga landscape drastically changed. Large scale mining was introduced by the Belgian mining company Union Minière du Haut Katanga (UMHK), which imposed itself on the land where traditional mining practices used to take place. From the colonial era up until today, production is focused on exportation, driven by global mineral demand.





In Lubumbashi, this former UMHK chimney is known as Mumbunda. The 'black mountain' next to it contains waste material from mining.



On the road from Lubumbashi to Kolwezi you pass the mining city Fungurume. Here you see an old railway that was constructed under colonial rule to export minerals.



Industrial production peaked in the 1960s and continued for a while after Congo's independence. Then president Mobutu nationalized UMHK to Gecamines, which continues to be the state-owned mining company till today. For around 20 years, Gecamines had its golden period, providing relative stability and social welfare programs for its workers.





However, in the 1990s, a combination of crises led to the decline of Gecamines. Thousands of people suddenly lost their jobs and fell into extreme poverty. Former workers, along with their wives and children, opted to go into the waste piles of industrial mines and gather minerals by hand. This was the start of the re-emergence and growth of artisanal mining, which continues up until today.



In the early 2000s, under pressure by international institutions, the DRC liberalized the mining sector. Huge concession areas were sold to foreign multinationals, without acknowledging the presence on this very same land by artisanal miners - repeating colonial practices of dispossession. It is in this context that today we see a tense but continued co-existence between large scale industrial mining (LSM) and artisanal small-scale mining (ASM).



The energy transition

About a decade later, the demand for the mineral cobalt skyrocketed. Cobalt is a key element of the rechargeable batteries used in electric vehicles and other technologies used for the green energy transition. As the DRC is home to around 70% of the global cobalt supply, this 'cobalt boom' brought the Kolwezi area into international spotlight.



A lot of capital and foreign investors came to the city of Kolwezi, which is now known as the 'cobalt capital' of the world. The city is still growing fast. However, people also warn about the possible disappearance of the city in the future, as it is located on valuable resources that are highly sought after.



A busy point in Kolwezi, with the shopping mall 'La Joie' in the background that had just opened in 2025.

Similar to earlier mining booms, many people from abroad came to Kolwezi. Whereas the liberalization in the early 2000s attracted investors from America, Canada, South Africa, Switzerland, and many other places, they were now increasingly replaced by Chinese investors. Their presence up until today becomes clear when you enter Kolwezi and see all the Chinese casinos, garages, and hospitals along with Indian and Lebanese restaurants.





Simultaneously, many more people from other provinces came to Kolwezi to go into artisanal mining, having heard about the high prices at the time. Today, it is estimated that around 200,000 people work directly in artisanal mining in this area, while the number of people dependent on the sector is even higher.



This photo essay largely takes place at the Mutoshi artisanal mine site, located at the edge of Kolwezi. As there are no legal zones for artisanal mining, miners are tolerated on parts of industrial concession areas as long as industrial activities have not yet started. This is for example the case at the Mutoshi site. Artisanal miners, organized in three cooperatives, are being tolerated by the industrial owner Chemaf to carry out their activities. For the time being, at least.



Mutoshi is one of the biggest sites around Kolwezi, with an estimated 20,000 people entering the site per day. The site is managed by cooperative members, who are also supported by agents from governmental services and international initiatives. This site is thus highly organized, differing from some other mines where people continue to work individually.



In Mutoshi, mining is carried out in team work. The miners are organized in teams of 3 to 7 people, supported by somebody who has invested in the creation of the pit, called the sponseur, who is also in charge of dividing percentages after production has started.





According to the law pits cannot be deeper than 30 meters. In reality however, the pits sometimes even go beyond 100 meters, as the more easily accessible minerals become exhausted, and minerals have to be found at deeper levels.



The pits also sometimes continue horizontally. With limited resources to properly secure these pits, some have a high risk of collapsing, trapping people inside and causing fatal accidents.





Artisanal mining continues to evolve, with the introduction of particular tools. Machines can be used to provide oxygen deep in the pits, to remove water from the pits and to lift the minerals to the surface, as you can see on the photo below. Tools like these are crucial to make the work less heavy and safer.



After the minerals have been brought to the surface, they are put into bags and transported from one point to another within the site. A transporter brings the bags either to a collection point, the washing basins or straight to the buying houses. This is done through carrying bags on the shoulders or using a bike or a motorcycle.





Minerals either exit the site to be sold elsewhere or are gathered and sold at buying houses within the site, called 'depots.' Here, the minerals are crushed and sorted. This is where the middlemen enter, including those called negociants and the eventual buyers of the minerals.



While according to the law only Congolese can buy minerals, in reality there is often a Chinese buyer in charge of the buying process. Sometimes they have invested in the site in exchange for a share of the minerals. They use different technologies to determine the prices of the minerals, including the balance (scale) to measure the weight and the metorex to measure the ore grade.



Miners accuse the buyers of tricking with these machines, paying the miners a lot less than the actual value of the minerals. In contrast to the 2010s people today earn very little from cobalt mining. Artisanal miners see the current low prices as one of the main challenges they face.

After the buying houses, the minerals are loaded on trucks and leave the site in large quantities to continue their journey to a processing facility.



Most of these facilities are also owned by Chinese buyers. Miners and cooperatives have limited access to them. This exclusion also leads to limited access to information on prices, mineral qualities, and knowledge of what happens to the minerals further along the supply chain.





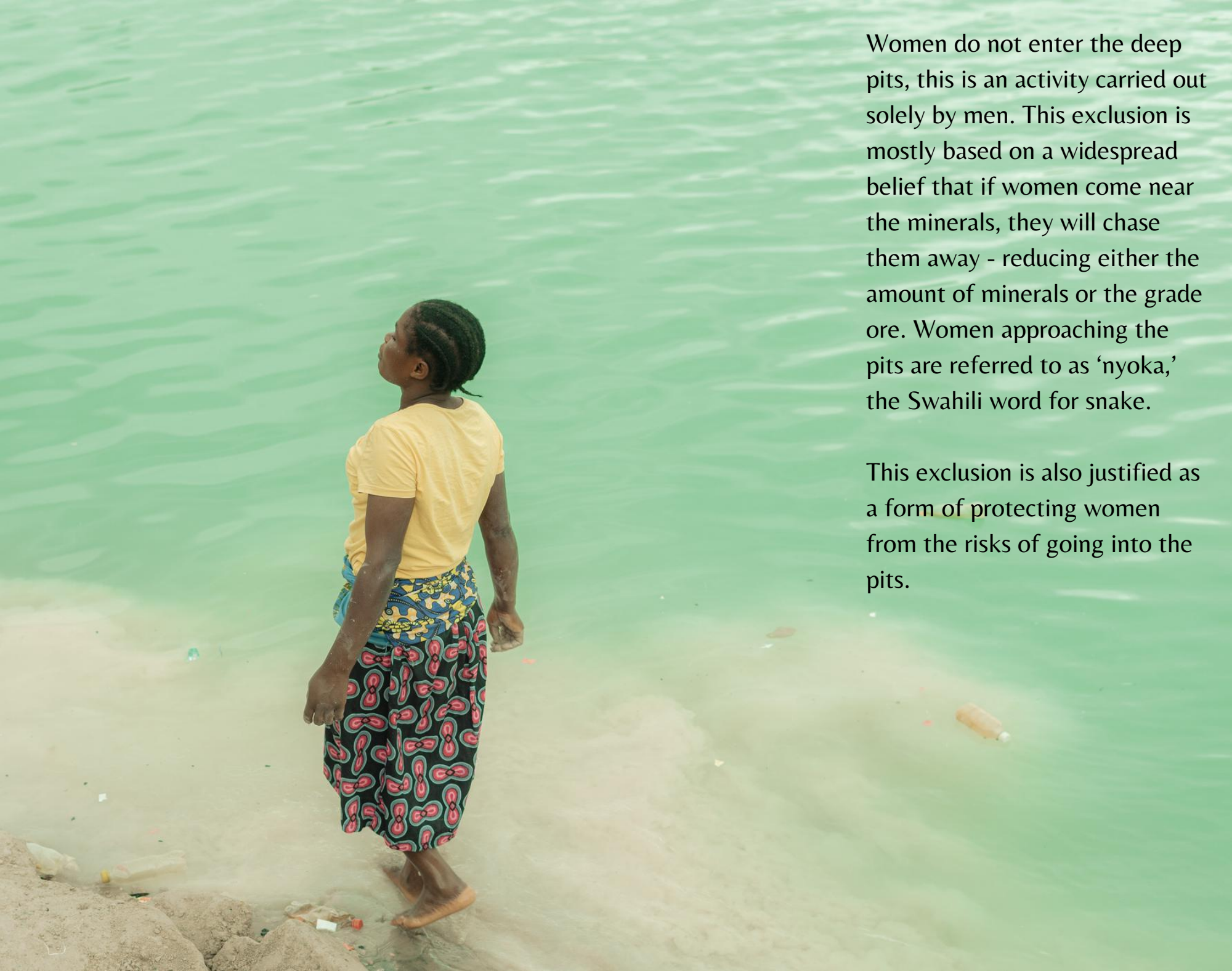
The minerals are transported by truck to Lubumbashi, from where they are further transported to the harbors of South Africa, Mozambique, or Tanzania. On the road, a lack of maintenance of both the trucks and the road cause frequent accidents.



As the DRC does not have the necessary refining capacities, 80% of the minerals are transported to China, where they are further processed and refined into end-products. It is during this refining process that most value is added to the minerals. China, the EU, and the US are the largest consumers of products containing cobalt.







Women do not enter the deep pits, this is an activity carried out solely by men. This exclusion is mostly based on a widespread belief that if women come near the minerals, they will chase them away - reducing either the amount of minerals or the grade ore. Women approaching the pits are referred to as 'nyoka,' the Swahili word for snake.

This exclusion is also justified as a form of protecting women from the risks of going into the pits.

Women do carry out many other activities at and around the mining sites, including their engagement in washing activities. The women wash the minerals the miners bring to them at the basins or rivers, before the minerals are brought to the depots.





Others work in the restaurants or shops, both inside and around the sites. Before or after the diggers go into the pits, they come to them to buy food or other products. Those with more money are known as the businesswomen.





There are many health risks involved with washing the minerals. The women are often in the water till their waists, constantly being in contact with water that is contaminated by the minerals. Without protection, there is a high risk of getting infected. Research has also shown that these infections can lead to birth malformations.





Despite these risks, women choose to stay in mining as there are limited alternatives. Besides, some women are happy and proud of the work they do. They also have their strategies to earn a bit more money. For example, while washing they save the mineral residues and mix these with stones with good quality ore. At the end of the day, they can fill a few bags and sell these at the buying houses themselves.





A whole economy thus revolves around the, predominantly male, miners going into the pits. Many more people, both men and women, participate in other types of activities in and around the sites.



Previously, artisanal mining was predominantly portrayed as dangerous and risky. Now, a shift is taking place in which state and industrial actors are increasingly acknowledging the sector's developmental potential and importance for local livelihoods. Actors along the cobalt supply chain present the formalization of the sector as a necessary step to enable 'responsible sourcing.'



In the Mutoshi site, signs indicate the prohibited access for pregnant women and children, as well as the prohibition of carrying heavy bags. These safety precautions have been a focus point of numerous 'responsible cobalt sourcing initiatives' that have multiplied in Kolwezi since 2016. Through these initiatives, state, industry and NGOs collaborate more actively, aiming to improve the working conditions in the sites.



Projects have also provided protective personal equipment (PPE), including clothing and gloves for those working in the depots, helmets and torches for the miners going into the pits, and equipment for the women washing the minerals.



While this equipment is very welcome, people also argue that superficial protection is not a miners' priority. For example, many women opt not to wear the boots as they tend to be quite heavy. Diggers too complain that the PPE hinders their flexibility when going into the pits.

In the sites, many miners do commend the cooperatives for the stability and order they bring, along with improvements in safety issues. For example, some cooperatives make sure the pits are covered during rainy season, to prevent the pits from getting slippery.





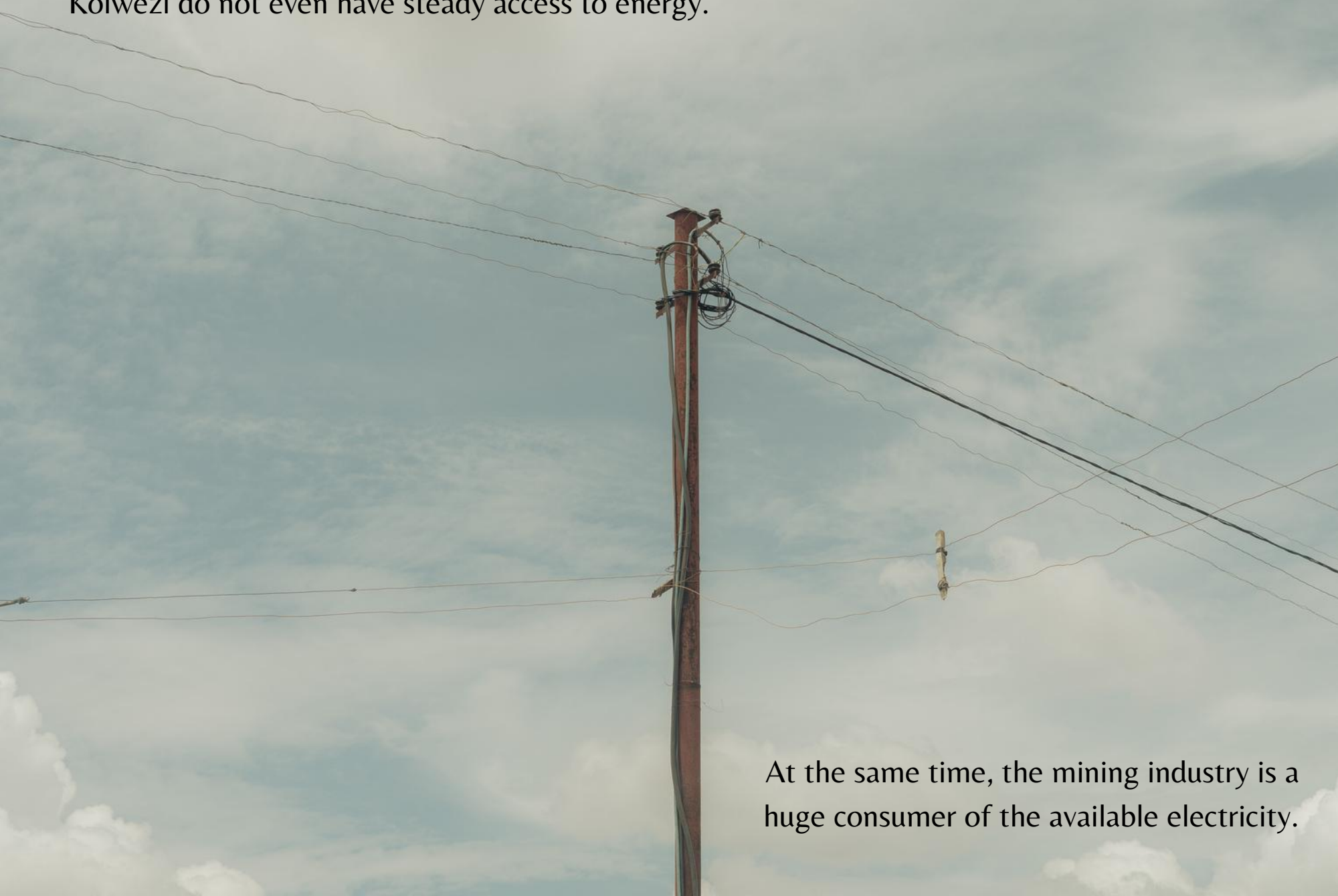
Kolwezi is a city where the impact and role of mining, both negative and positive, is very visible - far beyond the mining sites.



The contrast between those that benefit from the minerals and those that do not, is often blatantly clear.



This contrast is also painfully clear when looking at access to electricity. Whilst the minerals are used to produce clean energy, most people in Kolwezi do not even have steady access to energy.



At the same time, the mining industry is a huge consumer of the available electricity.



The majority of Congolese households use charcoal as their main energy source.

The same goes for the end-products containing cobalt. While cobalt is used for electric vehicles, this transportation mode is a far reality for those living around the sites. In Kolwezi people mainly use (shared) taxis, motorcycles, or the ones you see here known as ‘petita.’







The mining sites in Kolwezi surround the city and at some points directly border to its residential areas.



Due to this proximity, the explosives used in industrial mining frequently lead to fractures in surrounding houses and buildings.





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Furthermore, as a result of the huge mining concessions, there is very limited land for agricultural work. Most food and other products come from Zambia. The prices are much higher than in the past, as well as compared to prices in surrounding cities.





Besides agriculture, fishing activities have also reduced. Mining companies often dump their chemical waste in rivers, leading to water pollution.



Not only the fish are affected by the contaminated water, so are the people in surrounding villages living from the fish.





While international campaigns often focus on children working in the mines, little attention is paid to why these children are in the mines in the first place. This is thus partly due to industrial mining: their proximity to the city and their role in limiting alternative income possibilities.





When asked about the future, people in artisanal mining express a mixture of feelings. There is hope for formalization developments and projects to materialize, hope that mineral prices will go up again and that the people in the mines will benefit more from their cobalt.

But although the promise of projects and efforts to transform the sector create hopes, there are also serious concerns that underlying challenges will limit the positive impact for mining communities.






There is a broad sentiment of frustration about the delay of projects and actual change remaining absent. People also fear that all minerals will be used to the benefit of foreign companies, that the deposits will be exhausted with nothing left for future generations.

The delay of projects leading to changes can also be explained by the high political involvement in the mining sector, including in the organization of cooperatives. Many cooperatives are related to a politician or businessmen. As long as a small (global and national) elite is profiting from the current structures in place, the political incentive to actually reform the sector will remain low.

At the same time industrial actors still largely distance themselves from artisanal mining, stating that they do not source from this sector. In reality however, it is largely known that artisanally mined cobalt gets mixed with industrial supply chains.





Land issues also play a key role. As almost all of the land around Kolwezi is already sold to mining companies, there is a lack of space, at least on paper, to create legal zones for artisanal mining.



While artisanal miners are currently ‘tolerated’ in some industrial concessions, such as Mutoshi, this merely creates a solution in the short term. In the long term, artisanal miners face significant uncertainties. They always face the risk of being chased away, as they are working on land that according to the law belongs to somebody else, which also makes it difficult to make big investments.

With this photo essay we have aimed to capture multiple facets of cobalt mining in Kolwezi and the variety of people, practices and places included.

The future of ASM in Kolwezi depends on the extent to which diverse challenges will be addressed. Without doing so, current efforts risk providing short term rather than long term solutions, thereby reinforcing existing power inequalities rather than rendering positive impact for mining communities. Centering the lived realities, needs and priorities of mining communities, acknowledging their diversity as well as their challenges faced and looking beyond simplistic stories is crucial in order to enable a just and sustainable future.

We would like to thank everybody that has taken the time to share their stories, experiences, and thoughts with us and that have thereby played an invaluable role in enabling this project, especially those at the Mutoshi mine site. A special thanks to the support of the Université de Lubumbashi (UNILU) and the Institute of Development Policy (IOB) at the University of Antwerp for supporting this project.

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