Forthcoming: Extractive Industries and Society

'Hungry children don't ask fathers for food':
Gender, Security and the COVID pandemic in a Kenya Gold Mining Area

Doris Buss (doris.buss@carleton.ca)
Aluoka Otieno (aluokalegal@gmail.com)

Key Words

Covid-19
Pandemic
Gender
Social Reproduction
Gold
ASM
Security
Livelihoods

World count: 9950

Abstract

This paper contributes to the emerging research on COVID-19 pandemic effects on the artisanal and small-scale gold mining sector in sub-Sahara Africa. Drawing on the results from a 2022 rapid research visit to a gold mining area in western Kenya, where the authors have been carrying out a multi-year study since 2015, we explore women's distinctly gendered experiences of the mobility 'lock downs' imposed to contain the spread of COVID-19. Our discussion, informed by feminist analysis of social reproduction, considers how women's gendered roles in the household - clothing, feeding and caring for their children and families - and in mine sites, increased their exposure to police violence and food insecurity. We examine our results in relation to findings from the World Bank-funded

Delve surveys (2020; 2022), to reflect on the methodological implications, and future research directions, for more fully exploring gendered differences of security in times of 'crisis'.

1. Introduction

The COVID-19 pandemic, with its social distancing requirements and mobility restrictions, focused a spotlight on the over-looked role of informal economies and social reproduction in sustaining daily life across the globe. As countries introduced 'lock down' measures requiring whole populations to remain at home, the labour needed to continue feeding, educating, and healing those sheltering populations became, however briefly, visible in policy discussions. Those who could not shelter at home, because their work was essential to their families or communities, or their precarious livelihoods or caring roles did not allow for a suspension of economic activity, or because there was no safe/home within which to shelter, pointed to the essential role of social reproduction - the daily tasks of giving and sustaining life - as constituting a 'safety net' (Salzinger 2021, 498, Mezzadri 2022, Kesar, Bhattacharya et al. 2023). But this sustaining role of social reproduction was also revealed as profoundly precarious, reliant upon gendered and other structural inequalities that subsidized "the profits made in economies and markets" (African Feminism 2020, np). The COVID pandemic, with its lockdown measures, relied anew on this social reproduction labour while revealing the systematic "failure of social provisioning" (Ossome 2021, 75) in countries across the globe.

The impacts of the COVID-19 pandemic on informal economic sectors and gendered social reproduction is our interest in this paper. Our focus is on artisanal and small-scale mining, an informal sector with an expansive economic impact on rural communities in the global South

(Hilson, Van Bockstael et al. 2021), and which analysts from the World Bank, among others, feared would face "possible devastating consequences" because of the pandemic (Perks and Schneck 2021, 38). ASM is an increasingly vital rural economy, providing direct livelihoods for an estimated 44 million people globally, and 25 million people in sub-Saharan Africa (Hilson, Van Bockstael et al. 2021, 1-2; Delvedatabase.org). It is also characterized by high levels of precarity. Early studies of the pandemic impacts on this sector highlight the sudden drop in the price of some minerals, with 'drastic' reductions in the "income for many miners" " (Crawford, Lyster et al. 2020), triggering "a buyers' market" (Muthuri, Jain et al. 2021, 136) (see also, Calvimontesa, Massaroa et al. 2020, Hilson, Van Bockstael et al. 2021). Other research from northern Ghana echoes these concerns but notes the COVID-19 pandemic is just one moment in the lives of miners whose lives are already "chronically affected by such interruptions and are deeply precarious" (Pijpers and Luning 2021, 11).

While early indictors are that ASM populations suffered from the economic effects of the pandemic and government mandated mobility limits, the size and significance of ASM meant that it also, paradoxically, may have acted as a "safety net" (Crawford et al., 2020, 3), providing livelihoods for those displaced from other sectors. Gavin Hilson and colleagues note that ASM has long functioned as a "buffer against economic shocks and stresses" (Hilson et al., 2021, 11), and the expectation is that this will be the case for the COVID pandemic.

ASM is thus an important sector in understanding the effects of COVID-19 during and after pandemic restrictions were imposed. While the high rates of women's participation in ASM economies is often highlighted as yet another notable dimension of this sector, the gendered

impacts of the pandemic on women in ASM are largely under-examined. In the following discussion, we explore the results of a rapid 2022 visit to a gold mining area in western Kenya where we have been conducting on-going research on gender and gold ASM (ASGM). Our 2022 results revealed distinctly gendered patterns of insecurity experienced by women in two ASGM sites. These findings, outlined in sections three and four of the paper, run counter to those from the World Bank-funded Delve surveys. We consider these diverging results in the fifth section of the paper in terms of what they reveal about methodological choices in researching pandemic effects. We outline some possible questions and directions for future research on gender and 'crisis' in ASGM, and consider the implications for research methodologies when gender relations and social reproduction are more firmly centered in research approaches.

2. Methodology and Analytic Framework

The World Bank-funded Delve data-gathering projects (for a discussion, see Hilson et al., 2021, 7, and delvedatabase.org) are some of the few sources of which we are aware that provide limited, sex disaggregated data on the pandemic impacts on this sector. In the early stages of the pandemic in 2020, Delve solicited and posted on its website reports from ASM areas throughout the globe, including in Migori county, Kenya, the area where we had been researching women's gold ASM livelihoods. The World Bank then funded two telephone surveys of people in ASM areas; the first in 2020 (in 22 countries), the second in 2022 (30 countries).[i] Both surveys focused on seven areas: "(i) knowledge on COVID-19 and its prevention; (ii) access to work; (iii) food security; (iv) human security; (v) service delivery; (vi) supply chains; and (vii) recovery perspectives" (Perks and Schneck 2021. 38).

The survey results from 2020, disaggregated by sex, led to two conclusions of interest to us, and that were highlighted by Bank analysts, Rachel Perks and Nathan Schneck (2021). The first is that "impacts of COVID-19 related restrictions in mining communities have not been particularly gendered", and second that "impacts on human security have not worsened substantially" in the ASM areas studied (Perks and Schneck 2021, 41). On the first conclusion, Perks and Schneck conclude from the Delve survey data that women did not leave the mining sector during the pandemic (to take up other livelihoods, for example). The authors interpret this is a hopeful sign that "women have not retreated significantly from the mine sites at present", and that advocates could now use this moment to "cement progress on key gender equity indicators such as equal pay, reduction in various forms of gender-based violence, and increasing women-led and women-owned mining entities" (Perks and Schneck 2021, 41; Perks 2022). The surveys in both 2020 and 2022 noted that the pandemic led to food insecurity which remained a pressing problem when we visited in 2022, but that overall security, particularly for Kenya, was largely unchanged and did not worsen.

These two conclusions, and particularly the finding that security did not significantly worsen, shape the focus for this paper. In December 2022, almost a year after the country relaxed its COVID 19 containment rules, we traveled to Migori county in western Kenya as part of a new project, studying the impacts of the COVID pandemic on women's livelihoods in artisanal and small-scale gold mining in three countries (Kenya, Mozambique, and Sierra Leone). Along with other colleagues, we had been researching women's ASM livelihoods in Migori County since 2015.[ii] Team members annually visited Migori for 2 – 4 weeks at a time. The December 2022 visit was our first since July 2019. During our visit, we went to mining sites in Osiri, Nyatike,

and Masara, conducted participant observations, interviews with women and men miners, and two focus group discussions with women miners; one in a large gold site called Matanda, the second in a nearby site known as 'Copper,' in reference to its history as a colonial-era copper mine. Research participants spoke in a mix of English, Dholuo, and Kiswhahili with translation provided either by one of us (Otieno), or other participants (such as other women in the focus groups). Women participants in the focus groups were selected by women seen by other miners as leaders in the sites. All participants worked in processing roles outlined in section three, representative of the mining work that most women do. Women vendors, gold buyers and shaft owners were not represented in these groups. This was a preliminary, scoping visit and does not represent finished research.

We based our focus group and interview questions on those from the DELVE surveys adapted to focus on topics we expected to reveal gendered pandemic impacts on women given their social reproduction roles (see below, and Buss, Katz-Lavigne et al. 2020). Our approach draws from feminist political economy scholarship and particularly feminist research on social reproduction (Bakker 2007, Rai and Waylen 2014, Bhattacharya 2017). Feminist political economy scholarship explores economic life as socially embedded, enmeshed within and sustained by gendered norms within and outside the household. Social reproduction is often central to feminist approaches, highlighting three inter-related components: the biological and affective reproduction of "future labor"; the unpaid labour within the family, household, and community , such as food production, micro-enterprises, or volunteer roles; and the "reproduction of culture and ideology, which stabilizes dominant social relations" (Bedford and Rai 2010, 7). Feminist scholars have drawn attention to how women's social reproduction labour sustains economic

activity but is systematically devalued and overlooked (Bhattacharya 2017, Mezzadri 2022, Mezzadri, Newman et al. 2022). Reflecting the insights from this scholarship, our questions in this rapid, preliminary research trip explored: women's responsibilities during the pandemic (such as food provisioning); how they managed child care obligations alongside pursuing their livelihoods; which livelihoods they had access to (with what kinds of risks, or permissions) ; changes to how women access these roles as a result of the pandemic; and some, tentative exploration of the kinds of insecurity, whether physical, economic, emotional, they identified.

In centering women's social reproduction roles in our analysis, we follow the lead of feminist scholars urging a more critical approach to security, recognizing it as gendered and enmeshed within economic relations (Sjoberg 2009, True 2012, Meger 2015). Juanita Elias and Shirin Rai (Elias and Rai 2015, 426) identify three contexts where the gendered violence in the "everyday life in the global political economy" is particularly evident: a) "feminized global zones of work"; b) in public spaces that women navigate in accessing work; and c) in "the relationship between women's subordination in the household and forms of violence". As we discuss in section four, women's experience of insecurity during the pandemic containment measures was shaped by their social reproduction roles within the family as food providers, requiring them to leave their homes to access work and food, and within the mine site where they perform mining work making them more visible and vulnerable to police harassment and violence.

3. COVID-19 and ASM gold mining in Kenya

Beginning in March 2020, with a global pandemic announced, the Government of Kenya instituted a number of measures to limit the spread of the virus including closing the borders to international flights, closing schools, workplaces and, as we discuss below, mining sites. A nation-wide curfew between the hours of 7:00 pm and 5:00 am was introduced on 25 March, 2020 and all social gatherings including religious services were banned. [iii] Schools were closed, but began re-opening in stages beginning October 2020. [iv] A second bump in infection rates early in 2021 led to some additional restrictions, including closure of some schools (Pape and Delius 2021). By March 2022, all remaining COVID-19 restrictions in the country were lifted, but with hand hygiene and social distancing encouraged.

COVID containment measures like those introduced in Kenya were distinctly gendered in their economic and social effects, and appear to have exacerbated conditions of inequality, both at a macro level, between states, and within populations and households, and are expected to delay progress on the Sustainable Development Goals (Kinyondo and Pelizzo 2021, Barrett, Kajumba et al. 2022, Betho, Chelengo et al. 2022, Flor, Friedman et al. 2022, Mueller, Ngunjiri et al. 2022)[v]. Their impacts track along existing inequalities, the examination of which requires attending to the "complex web of interconnected vulnerabilities and inequalities that have magnified disadvantage and subordination" (Barrett et al. 2022, 7).

In the following section, we introduce the mining areas in Migori where we have been carrying out research both in the longer-term projects and in the rapid visit in December 2022 that is the focus of this paper. We briefly outline some of the gendered divisions of labour within the mine site that structure, in part, how women navigate their mining livelihoods in ways that had

gendered impacts when the pandemic lockdowns were put in place. The gendered dynamics of ASGM in western Kenya have been the subject of more detailed study beyond the brief overview we provide here ((Amutabi and Lutta-Mukhebi 2001, Mitullah, Ogola et al. 2003, Buss, Katz-Lavigne et al. 2020)

3.1 Gender and Gold Mining in Migori, Kenya

ASGM takes place in many parts of Migori County, located in the western part of the country near Lake Victoria. While the 2016 Mining Act and Policy both envision formalizing this hard-rock mining sector, most miners continue to operate without a license. One study estimated than Kenya's ASGM sector provided jobs for 40,000 people, while the broader ASM sector supports an estimated "800,000 Kenyans" (Barreto, Schein et al. 2018, iii-iv). The Matanda and Copper sites were we focused our research, are on what was once referred to as "trust" land and hence tend to be more open- access than gold mining sites located on individually titled land. Mining has been taking places for decades.

Many of the women and men we spoke with during our annual visits to the Matanda site had moved from other parts of western Kenya, or were from local villages near the sites. While most people we encountered are Kenyans, there were also some Tanzanians doing mining work. Many of the women and men speak Dholuo, and the households and land access in Migori county tend to be patriarchal and patrilineal. The county has the second highest polygamy rate in the country (Kinyanjui 2023), and women report experiences of violence at higher rates than the national average (Kenya National Bureau of Statistics 2022).

Agriculture, livestock, small-scale mining, fishing, and small business enterprises are the main economic activities in Migori County (County Government of Migori 2023, 18), but research in the Matanda area concluded that mining is the main livelihood (Barreto, Schein et al. 2018, iv). Almost half (45%) of households are headed by women (Barreto, Schein et al. 2018, 12, 73), with many women working Matanda widowed, some of whom said they were forced from their homes upon the death of their spouse, a pattern found in a study of the high rates of HIV/AIDS in this area (Dworkin, Grabe et al. 2013). But married and younger, single women are also active in mining and vending businesses sometimes alongside their husbands who might have separate but overlapping mining businesses. The women we met who owned mining or vending businesses tended to have more educational attainment than those doing less remunerated processing roles (see also Mitullah, Ogola et al. 2003, 283-284)

Gender norms that prohibit women from going into mining shafts prevail in this area, though with some exceptions (Buss, Katz-Lavigne et al. 2020). The vast majority of women do mineral processing work, and/or have small vending businesses, but women are not uniform in their class position. Among the roles where women are generally found on the site, and which are the least well remunerated are those buying "*tope*" for processing, which is ore seen as having little value and which is generated from blasting within the shafts when the miners are looking for richer gold veins. Other women provide labour for a small fee at different processing stages, such as doing the ore breaking ("*parata*"), or at the sluicing ponds (*odawo,* or *adawa*, singular), where gold amalgamation is done using elemental mercury. Some women do *oyweyo,* processing dust they have swept from the ground in previously worked areas, or *changa,* which refers to digging waste soil at dumping sites or closed mines for processing. These women likely earn the least.

Women who earn more from mining include those who own odawo (ponds), the tailings from which earn a profit when sold to local dealers. While men may also do some of these processing roles, women likely constitute more than 90% of those doing this work. The women we spoke with who own multiple businesses, invest in mine shafts, or are gold buyers tend to have more education and/or male family members who have access to land rights and capital (see also Mitullah, Ogola et al. 2003, 283-284). This group of more affluent women include wives of land and mine shaft owners who may also have their own mining processing installations (odawo, for example) and/or manage the processing of ore from their husband's shafts.

Numbers of women and men mining in Matanda and Copper are difficult to estimate with men mostly working underground and out of sight and women above ground. One rapid study estimated that 620 people directly employed in the Matanda mine area, 62% men and 38% women (Barreto et al., 2019, 14, 15). Though women and men in the mining areas will often have other livelihoods, such as agriculture, almost all told us over the years that mining is the most lucrative.

3.2 Covid-19 and 'Lock Down' impacts in Migori

The lockdowns and curfew introduced in 2020 had distinct impacts on the populations of miners in Matanda and Copper. By the end of March, the government had ordered county governments to close all non-essential businesses, including artisanal and small-scale mines (Muthuri, Jain et al. 2021). This ban stayed in place but some shafts began functioning again later in April (de Haan and Dales 2020). Each of the two mines has an association of miners (almost all men)

which liaised with government officials to close the mines and then to ensure that safety precautions, like hand washing stations were in place (see further discussions of these committees below). Schools also closed during this time, and children of school age were sent home.

These government containment measures had disastrous impacts on miners, both women and men, who rely on selling small amounts of gold daily to pay for food and other essential expenses. While we had been carrying out annual research for a number of years, our rapid return visit in December 2022 is the basis of our data in this paper. We turn now to our findings from this visit.

3.2.1 Gold prices and food prices

In our interviews and focus groups, everyone emphasized the drop in gold prices in the initial months of the pandemic, echoing reports from other ASM producing regions on the African continent (Hilson et al., 2021; Perks and Schneck 2021, 38). In the Matanda site, where the quality of gold is said to be better than neighbouring Copper, the price reportedly dropped to a low of about Khs 1800 for a gram (then equivalent to about USD 33.00; de Haan and Dales 2020, np). By comparison, it was selling for between Ksh 3000 – 3400 when we visited in July 2019, and Ksh 5000 /gram (equivalent to USD $41.00), during our December 2022 visit. This price drop in March/April 2020 appeared to last only about a month or a bit longer, but it also overlapped with the shut-down of the Matanda and Copper sites altogether. For women and men relying on the gold sector for their livelihoods, this meant that for a time they had no or limited income.

The collapse in the price of gold was accompanied by an increase in prices for basic good items, also a phenomenon found across the continent (Agyei, Isshaq et al. 2021), and which was still prevalent during our December 2022 visit. Miners in the Matanda area, as well as some food vendors, who are often women, depend on traders for food supply. Mobility restrictions introduced by the Government imposed limits on the numbers of people in a single vehicle, increasing the costs for those traveling to buy or deliver food. International borders were also shut. Prices of main food sources, maize and vegetables, soared. The diverse food imports from Tanzania also disappeared due to the closure of the border, which is a short distance from Migori town. While some of the increase in food insecurity is the result of this combination of COVID-related factors, the pandemic also overlapped with other environmental conditions, not least of which was a drought in the country (Kansiime, Tambo et al. 2021).

A respondent in one of the focus group discussions described the transport restrictions and food impacts this way:

> Even getting from here to Migori town was a big challenge. In a vehicle that ordinarily transports fourteen (14) passengers. We could only carry four people. A motorcycle could only have a single pillion passenger. Fares increased tremendously. Food prices increased and mostly remained expensive in the entire period. Fuel prices also escalated. In many situations, food was expensive and unavailable because of COVID-19. It remained so, but right now it is still expensive but accessible. We are still paying the cost of COVID-19.

3.2.2. School Closures

Schools and colleges were shut down for about a year during the pandemic (Areba 2020). Normally fees for boarding schools, which are common, include food. When schools closed and these children returned home, they had to be fed, and then when school resumed many months later, school fees had to be paid. In the gendered division of labour, women are said to be primarily responsible for paying school fees according to the many women and men we spoke with.

These developments – loss of income and increased price/difficulty accessing food, school clsoures – impacted everyone but also were gendered. In the following section, we explore how women's social reproductive roles exposed them and their families to increased insecurity during Covid-19 lock down measures.

4. "Women suffered more differently than men": Social Reproduction and Insecurity

With the mines closed under government directives, all the "livelihoods were shut down", as one woman summarized. "The county administration put up a barrier at the mine gate, and no one could get in. All the money generating areas were closed down…. Hotels, bars, shops etc.", she added. While everyone in this area was impacted, because of the social reproductive roles, women were distinctly effected. Figures for changes in income in Matanda and Copper are not available, research in Kenya more broadly found that women were more likely than men to have lost income. For example, in a telephone survey carried out in August 2020 by the Government of Kenya and UN Women, 20% of women respondents said they "lost all income since the onset of COVID-19 compared to 12 per cent of men". Women also reported worrying more about the economic impacts than men, and concerns about food were reported by over half the women surveyed (UN Women, Government of Kenya 2021, 17).

In our discussions with women in the two mine sites, the reported economic impacts on them were extreme. Yet, women, moreso than men, were responsible for continuing to feed their children and dependents. Those who ran small businesses also still needed to buy and sell food stuff such as grains, vegetables and fruits, or second hand clothes. Some women relied on food grown on their 'shamba' (fields), but others could not, possibly because they did not have a shamba or could not access it because of travel restrictions. Some focus group participants said they shared some of their food with those women.

The difficulties accessing food to feed families fell disproportionately on women. In some cases, this is because women are household heads, but this responsibility is commonly allocated to women in the gendered division of labour. The gendered norms of feeding and caring for children combined with food insecurity meant that women in the area continued to try and do mining work, making them targets of violence and intimidation by authorities, like the police, enforcing the curfew and other COVID containment measures.

4.1 Police violence and intimidation

Police violence and corruption is a long-standing and complex problem in Kenya, pre-dating the COVID lockdowns (Jones, Kimari et al. 2017, Mueller, Ngunjiri et al. 2022). But the initial period of COVID-19 saw high rates of sometimes lethal, police violence, ostensibly enacted in the name of enforcing public health regulations (Human Rights Watch 2020, Kabiru 2020, Kenya Human Rights Commission 2020). In Migori, policing interventions during the lock-

downs widely reverberated in the interviews. Even though some of these events were more than two years old, women and men still spoke emphatically about the police harassment and violence, noting women were particularly targeted.

Some male miners, we were told, could sneak into the mines, and go underground into the shaft to mine, and even process the gold inside the tunnels out of sight. Women miners, clustered in processing roles done above ground, could not so easily sneak into the mine to earn money, and nor could they easily evade arrest.

Women's responsibilities for providing food was said to be a key factor in exposing them to the risks of police harassment and violence. As one respondent explained,

> Women suffered in the pandemic more differently than men. There was even more sufferings in the hands of the police… hungry children do not ask their fathers for food; they ask their mothers. The men may go out but the children do not follow them to ask for food from them. This befalls the women. During the pandemic, women were stuck. Even if you could work in hiding, it was better than nothing. You would not be at peace anywhere. It was a hectic time.

Women, thus, had to make money and then find food to buy. They repeatedly risked police force and fines for failing to wear a face mask or being outside close to or after curfew. Police response to purported infringements sometimes took the form of random violence, kicking over a woman's pot while she cooked after curfew, for example. One woman told a story of meeting

three police officers at curfew time as she was trying to get home from doing mining work. She resisted arrest by pretending she could not understand Kiswahili, the language used by the police. They still took her food, she said, and kicked her before telling her to run home and not look backwards.

Commonly, women would be arrested and held by police until a 'fine' (or a bribe) was paid. As one woman noted:

> The police were really harassing people. They could even follow you right into your house. The curfew required that we be in the house by 7.00 pm but that would reach sometimes before you even go to the market, and when the police catch up with you, you would not be released without giving them a bribe of Ksh 2,000. This was the standard bribe. It was stressful having to be in the house by 7.00 pm. Many women would be arrested, even right next to your house.

We were told that sometimes police arrested children found without masks in the trading centers. Paying fines to release family members fell mostly to family members but the male mining association leaders said they also intervened with the police to pay fines for the women held by the police.

Even after the mines opened under restricted conditions, the effects of the pandemic and government mitigation measures continued to negatively affect the lives of the women and men in this area, and often with distinctly gendered contours. According to a woman miner:

> When it was reopened, we couldn't go at once into the mines the way we were used to working before. The police would patrol the area to enforce social distance. They could arrest people anyhow, so to speak, for violating the rules on social distance or wearing of masks in public. Some of us began working on a shift system due to the restrictions. In this way, more people would have the opportunity to work in the mines. Due to the new schedules, and for fear of policemen, many of the women only worked for minimal hours in a day merely to keep going.

As part of the re-opening, masks, hand-washing and social distancing were required. While these practices within mine shafts were hard to monitor, women said the police actively monitored mask wearing. Initially, they said masks were expensive retailing for about US $ 1 per piece of surgical mask. The N95 mask was even more costly. With time, the prices came down. Some of the respondents noted that a few women tailors in the mine sites maximized on making affordable clothe masks, which were in high demand when the mines eventually reopened.

4.2 Care, family and other dependency relationships

Other caring demands on women also shaped their experience of security. Some women spoke of their concerns about caring for sick and elderly members of their families, the lack of health care options particularly for women delivering babies, and concerns about pregnancies in older children who were home from school.

For example, a miner whose daughter died during the pandemic said she was ordered to bury her daughter within two days, meaning that she had to transport the body from Migori to her home, about 200 kilometers away, as well as make necessary arrangements to clear the hospital bills, release the body of her daughter from the morgue and finalize burial arrangements, all within that time period. Luo traditions on death and burials are very elaborate and require longer grieving for a departed loved one.[vi] Other respondents noted that the dusk to dawn curfew also made it difficult for people who had to deal with emergency health situations in the night.

With schools and colleges closed, school children were back in the villages. Some of the women mentioned young women or girls getting pregnant. As one woman said, "We had trouble with our children at home. The girls gave birth at home. Increasingly this became a burden to many people." While we do not have sufficient data to explain the contexts giving rise to this perception of increased pregnancies, one woman miner explained it this way:

> Unwanted pregnancies came about because of lack of money. The young girls would go around looking for men to get some little money to sustain them. This made the girls vulnerable. They were not studying at home. But also some of the boys got involved in drugs and alcohol. This was not helpful.

Finally, we asked women in the focus groups about violence or increased tension between women and men in the household. No woman reported concerns about fighting or abuse within the household. To the contrary, women in one of the focus groups said that the strict enforcement

of COVID 19 movement rules helped to bring the men closer to their families. Some of the adjustments were viewed as positive as seen below:

> Corona taught the men a lesson. Men would come back home early, something unheard of before the pandemic. At last, children would now recognize their fathers. Before Corona, some men would never get back home early. We were now taking supper together with them. Before Corona, this was only a dream. They would come back so late, as late as 3.00 am in the morning, often drunk. If they had a lot of money, you would only see him after the money is finished.

Another woman noted:

> The men also panicked. What if I bring COVID 19 virus to my family and spread the infections? The fear got the better of them and this was very good to us. Many men left alcohol as a result. So in this sense, corona gave us a bit of peace in the house.

This result, while suggestive about changing intra-household dynamics during the lockdown period for some, may also reflect the limitation of our rapid research, a theme we return to below.

4.2.1 Supports from Governments and Male Mining Leaders

The women and men in this region reported that they did not receive much support, if any, from government officials. The Government of Kenya instituted measures to address the economic impacts of the pandemic, and to promote economic recovery including funds for hiring "essential

workers" in health, education and tourism (Human Rights Watch 2020, Kabiru 2020, Kenya Human Rights Commission 2020). A cash transfer system aimed at "older people, orphans, and those with underlying health conditions" was also introduced in March, 2020 (HRW 2021, 1), as was an economic stimulus package, including tax reductions, in May that year (Muthuri, Jain et al., 2021, 130-131; Ossome 2021, 74). Some food stuffs were eventually distributed to the communities in the mining areas of Matanda and Copper but none of our respondents mentioned receiving help through any other government programs. Preliminary research elsewhere in Kenya (Osse 2016, Jones, Kimari et al. 2017) suggests that these programs largely failed to reach those in informal sectors, and particularly so outside of the capital city Nairobi, such as the women and men miners in Migori.

Eventually, some government assistance was provided in the form of maize and beans but the women told us this was too little, and came too late for many who needed food earlier. The mining committees in both Matanda and Copper, and individual mine shaft owners, became pivotal advocates and sometimes providers of food assistance for the populations reliant upon mining. Members of the Migori county Artisanal Mining Committee, formalized under the 2016 Mining Act, negotiated with government officials to resume mining in the area with virus mitigation measures in place such as hand sanitizing, social distancing and mask wearing. The county governor reportedly visited the main mining areas of Osiri and Nyatike to monitor the situation. He met with miners who directly pleaded with him to resume mining.

Several of the women we spoke with in both sites mentioned the role of senior male miners in helping women in the pandemic. In Copper, male leaders of the Copper Hill SACCO Society explained that they gathered money to 'bail out' women held by police for supposed curfew

infractions, while a senior woman miner underscored the help women received from one of the male shaft owners. The extent of this assistance, and the terms by which it was offered, will require further research. But, like the other preliminary findings in our rapid research visit, these tentative insights point to a more complex experience of the pandemic and security, provoking questions about research methodologies for studying gendered experiences of the pandemic.

5. Researching "Crises" and their Gendered Impacts

The characterization and experience of something as a crisis requires careful attention. Crises and the experience of crises are contingent (Pijpers and Luning 2021, 11, Smith, Davies et al. 2021). Gender, rurality, and class all shape how and with what effect 'crises' emerge and have effects. Similar social vectors are in play in how some phenomenon are nameable as a crisis, and the kinds of governance projects the label 'crisis' authorizes (Meagher 2022). ASM populations in sub-Saharan African often live with chronic crises, and for some of the respondents in Pijpers and Luning's study in northern Ghana, the pandemic was "'just' another interruption" in their livelihoods (2021, 10). Our research suggests that for women, the pandemic was a very difficult, and different time, with severe disruptions to their families, health, security and access to food. For them, this was not 'just' another interruption. While our research results are preliminary, they highlight gender inequality as shaping women's experience of the pandemic in ways that are consistent with findings in other sectors. Globally, research demonstrates that women were disproportionately affected by the combination of economic retraction, mobility restrictions, and the closure of schools (Flor, Friedman et al. et al 2022; Smith, Davies et al. 2021; Shukla, Ezebuihe et al. 2023).

These impacts, we suggest, would seem to run counter to the preliminary findings from the Delve survey data discussed at the outset of this paper and which concluded, to recap, that "impacts of COVID-19 related restrictions in mining communities have not been particularly gendered", and that "impacts on human security have not worsened substantially" in the ASM areas studied (Perks and Schneck 2021, 41).

In the following discussion, we consider our findings in relation to these two conclusions. Both our research and that of the Delve surveys are preliminary. What interests us about the apparent contradictions in our findings is what they suggest about research methodologies for examining the gendered impacts of the pandemic as a crisis, and possible directions for future research.

5.1 Social Reproduction and methodological implications for researching gender insecurity and crisis

The Delve surveys suggest that artisanal and small-scale miners in Kenya did not experience increased insecurity during the pandemic. The 2022 survey asked: "how would you rate the security situation in your community/village?"; and "has insecurity increased or decreased or stayed the same?" from the period before COVID. The responses from Kenyan artisanal and small-scale miners on the first question translated into a weighted compositive score of 0.730/2.0 or "very secure." Answers for the second question, the security situation, fell into the category of "staying the same".[vii]

The accounts of police violence targeting women in Matanda and Copper mining areas reveal high levels of insecurity for some miners and at certain times in the pandemic. Women's social reproduction roles, such as their responsibilities for providing food for their children, together with the gendered division of mining labour meant they were particularly visible to the police. The accounts from the women highlight their vulnerability to violence, harassment and extortion when they were traveling to and from the mines to work, to markets to buy food, and in front of their houses cooking food. Lyn Ossome, writing on similar violent surveillance and targeting of women in Ethiopia, argues that this violence cannot be seen as separate from women's social reproduction roles and the coercive regulation of women's labour (Ossome 2021, 74).

Another area where we would expect to find evidence of distinctly gendered forms of insecurity with pandemic-related contexts is domestic or intimate partner violence. But here, our rapid study results are particularly incomplete. These results - or 'non' results -run counter to the overwhelming body of research and expectation about violence facing women during the pandemic globally (UN Women and World Health Organization. 2020). The Kenyan organization, Healthcare Assistance Kenya, reported a 301% increase in reports of SGBV in the first two weeks of the country's lockdown (as reported in Human Rights Watch 2021, 3). Other research conducted in Nairobi and Migori found increased concerns about violence expressed by adolescent girls in these regions (UN Women and World Health Organization). Research conducted in Siaya, a Luo community several hours north of Migori, found that adolescent girls in the fourth form of school in October/November 2020, reported being more sexually active, "twice as likely to report their first sex was not desired" than a comparator group of adolescents girls/young women who graduated school before the pandemic (Zulaika, Bulbarelli et al. 2022).

In that same study, 36.2% of the respondents noted increased violence, and 43.4% reported increased crime in their communities.

It is reasonable to assume that intimate partner violence was experienced by women in Matanda and Copper mining areas during the lock-down and curfew periods, given the research from other parts of Kenya and sub-Sahara Africa. Our results, like those of the Delve survey, point to methodological challenges in researching security impacts of the pandemic. Silence and under-reporting of sexual and gender-based violence, including intimate partner violence, are common and shaped by complex security calculations, thus posing their own distinct methodological challenges (Davies, True et al. 2016).

Research conducted during the pandemic from a distance, using telephones, WhatsApp messages, and/or interlocutors, also have limitations (Barrett, Kajumba, and Norton 2022, 12; Flor et al. 2022). In their meta-study, Luisa Flor and colleagues (2022, 2391) note that data collection during the pandemic was most often done using technology that required a smart phone and literacy, both of which maybe gendered, with women in sub-Saharan Africa less likely to have a smart phone and more likely than men to have no or limited literacy (Flor, Friedman et al. 2022, 2393-2394) .

The Delve survey as with other studies on ASM impacts, were similarly conducted from a distance, using telephones, often relying upon interlocutors, like miners' associations or cooperatives, which are male- and elite-dominated (see e.g., (Calvimontesa, Massaroa et al. 2020, Muthuri, Jain et al. 2021). The reasons for this approach during the pandemic are

understandable. However, they likely reproduced gendered erasures in the resulting data. While many women miners in the Matanda and Copper sites will have cell phones, these are unlikely to be smart phones, the women may not speak Kiswahili (many only speak Dholuo), and they may not be known to the NGOs and partners who assisted in the Delve data collection. Where miners' associations or cooperatives were the principal point of entry for the researchers, the results may be over- representative of elite, male miners with their own, distinct experiences of security. Not only should future research use methodologies that will capture the experiences of women or other marginalized participants, but categories like 'security' need further nuance, attentive to the ways in which women and men may understand security differently.

5.2 Researching financial loss and harm

Equally important is a consideration of social reproduction in shaping the kinds of risks, violence and financial loss experienced by women and men which would bring a deeper analysis of security (Rai, Hoskyns et al. 2014). Much of the data gathered on the pandemic and its effects on ASM communities discuss gold prices in the mining areas and global markets as this impacts daily incomes and food for people in the area. As a research indicator, however, the focus on gold prices is limited.

The impacts of changes in prices for gold bought from artisanal and small-scale miners is shaped by social and economic vectors of inequality. Gender inequality is particularly relevant here (alongside class, nationality - in the case of the Tanzanians who had to move quickly back across the border for example - age and physical disability). Gendered social inequalities shape the kinds of roles women and men do in mining areas and hence their access to different levels of

remuneration, their ability to save money or develop other kinds of mechanisms to buffer the effects of illness, accidents, and similar life changes. Social reproduction is also important. As we know from other studies (Buss, Rutherford et al. 2019, Rutherford 2020, Arthur-Holmes 2021), women's mining work is shaped by their domestic responsibilities. Women often have less time for mining work when they have to attend to other domestic work, like growing and preparing food, caring for children, paying for and managing children's access to schooling. These responsibilities may also mean that women are less likely to accumulate savings that can buffer them during crises or other fallow periods. The reduction in the price of gold is more heavily felt by those who have no financial reserves. Women are more likely to be in this category. Research on the pandemic impacts on women and men in Kenya point to a greater loss of income by women, and a corresponding increase in women's time spent on domestic work and that women were more likely to be impacted by food insecurity (Kansiime, Tambo et al. 2021, Mueller, Ngunjiri et al. 2022).

Not only are the effects of price changes variable, but so too is the price itself. Prices paid in mining areas can be tricky to assess with different people offering different versions of the price. Some of this is characteristic of a sector operating at the margins of legality (where there may be different motivations to over or under-inflate the price). But some of the differences point to varied access to mineral buyers and prices. Women in the areas we studied are more likely to sell their gold locally because they do not have access to the money/transport needed to go to larger centres where gold fetches a higher price. Mining elites, who are largely male, do. The difference can be significant. In December 2022, the price of gold in Matanda was reported as Ksh 5000/gram, and in Migori town we were told it was Ksh 6-7000/gram.

Hence, while the fluctuating price of gold in March and April 2020 point to the extraordinarily disruptive effects of the pandemic, the mine-level prices of gold is a crude indicator that may gloss over important social contexts in which gold prices take shape and have meaning.

5.3 Gendered dependency relationships and researching coping strategies

No one we spoke with reported receiving financial assistance from the Government (whether central or county levels), and while some state food assistance was provided, it was either limited or arriving after the period of acute need. This absence of state-provided assistance raises its own distinct research questions about the different ways in which women and men were able to access assistance through savings, selling assets, alternative economies, like sexual services, or seeking help from familial or other "distributional" networks (Ferguson 2015, 47).

Research on coping strategies in Kenya conducted by the World Bank suggest that initially, male-headed households relied on savings and/or selling assets, female-headed households relied more on support from social networks (Xu, Delius et al. 2022). Both women and men reported cutting back on food as a coping strategy. Future research should explore who in the mining area had savings they could draw upon to sustain themselves during the lock down. Were people able to turn to other kinds of relationships , such as kin networks? Were there differences between women and men's ability to make claims for support within these structures? Women in this mining area are often involved in one or more 'tabletop banking' groups. How did these

function, if at all, during the pandemic? Finally did women's mining-related businesses recover? Were they able to access capital to resume operations as shops, bars/restaurants, gold buyers?

A related issue is about women's experience of police detention and the role of male mining elites. As discussed above, the women in the focus groups spoke powerfully about their experiences of being detained by the police and required to pay a fine. In these repeated encounters, some women relied upon male family members and/or male leaders to secure their release. Several women noted their appreciation for the help received from these senior men, in a context where official state actors were mostly absent. The role of miners' associations and cooperatives during the pandemic is an important one. How did their roles change or become newly legible through the pandemic? In a context where women's 'empowerment' through ASM is increasingly referenced (see e.g., UN Women 2016), does this experience during COVID make it harder for women to be seen as leaders, instead of recipients of male help?

These questions and some of our preliminary findings speak to the Delve survey results that women did not leave ASM economies during the pandemic, and that this finding provides an opening to "cement progress on key gender equity indicators such as equal pay, reduction in various forms of gender-based violence, and increasing women-led and women-owned mining entities" (Perks and Schneck 2021, 41). As our discussion above indicates, for women living in the mining areas, accessing mining livelihoods was essential for their survival, but the fact that they did mining work tells us little about the risks, relationships, limitations, and costs of negotiating this access.

Conclusion

In this paper we have drawn from a rapid research visit, conducted in the context of a longer, multi-year study, to a gold mining area in western Kenya to explore how women experienced and navigated the COVID-19 pandemic. Our findings run counter to those captured by the Delve surveys conducted in 2020 and 2022 in ASM sites, which suggested minimal gendered differentiation in the pandemic effects and a stable security situation in Kenyan ASM areas. Our research revealed a distinctly gendered experience of physical and economic insecurity linked to women's social reproduction roles in ASM and in their households. While both our results and those of the Delve project are preliminary, the differences in our findings offers a basis from which to reflect on research methods used to study the pandemic and its impacts on this important rural economy in sub-Saharan Africa. While distance research was unavoidable during the pandemic, there is a danger of overlooking the limitations of that data, particularly in scoping new policy interventions in this sector.

As Hilson and colleagues note (Hilson, Van Bockstael et al. 2021, 7), it is imperative that data on the pandemic be carried out with "consciousness of the high risk for bias" stemming from how and by whom data is collected, and the importance of "showcasing the diversity of ASM". Gender inequality, as we have argued, is a crucial vector structuring ASM livelihoods and particularly so in the context of a pandemic that is itself a "compounded crisis of social reproduction" (Mezzadri, 2022, 1231). As research on the pandemic effects on ASM and other informal sectors gets underway, we argue here for the importance of placing gender inequality and social reproduction at the centre of research.

BIBLIOGRAPHY

African Feminism (2020). "African Feminist Post-COVID Econoimc Recovery Statement." African Feminism https://africanfeminism.com/african-feminist-post-covid-19-economic-recovery-statement/ 2023.

Agyei, S. K., Z. Isshaq, S. Frimpong, A. M. Adam, A. Bossman and O. Asiamah (2021). "COVID-19 and food prices in sub-Saharan Africa." African Development Review **33**(S1): S102-S113.

Amutabi, M. and M. Lutta-Mukhebi (2001). "Gender and mining in Kenya: The case of Mukibira mines in Vihiga District." Jenda: A Journal of Culture and Women Studies **1**(2): 1-23.

Arthur-Holmes, F. (2021). "Gendered division of labour and "sympathy" in artisanal and small-scale gold mining in Prestea-Huni Valley Municipality, Ghana." Journal of Rural Studies **81**: 358-362.

Bakker, I. (2007). "Social reproduction and the constitution of a gendered political economy " New Political Economy **12**: 541-556.

Barreto, L. M., P. Schein, J. Hinton and F. Hruschka (2018). Economic contributions of artisnal and small-scale mining in Kenya: Gold and gemstones. United Kingdom, Department for International Development., East Africa Research Fund.

Barrett, S., T. C. Kajumba and A. Norton (2022). Mapping COVID-19's web of impact. Rising inequality, convergence on hold and lessons to learn. Issue Paper. I. I. f. E. a. Development. London, IIED. **November 2022**.

Bedford, K. and S. Rai (2010). "Feminist Theorize International Political Economy." Signs **36**(1): 1-18.

Betho, R., M. Chelengo, S. Jones, M. Keller, I. H. Mussagy, D. van Seventer and F. Tarp (2022). "The macroeconomic impact of COVID-19 in Mozambique: A Social accounting matrix approach." Journal of international Development **34**: 823-860.

Bhattacharya, T. (2017). Introduction: Mapping Social Reproduction Theory. Social Reproduction Theory: Remapping Class, Recentering Oppression. T. Bhattacharya. London, Pluto**:** 10-.

Buss, D., S. Katz-Lavigne, O. Aluoka and E. Alma (2020). ""Remember the women of Osiri": women and gender in artisanal and small-scale mining in Migori County, Kenya." Canadian Journal of African Studies / Revue canadienne des études africaines **54**(1): 177-195.

Buss, D., B. Rutherford, J. Stewart, G. E. Côté, A. Sebina-Zziwa, R. Kibombo, J. Hinton and J. Lebert (2019). "Gender and artisanal and small-scale mining: implications for formalization." The Extractive Industries and Society **6**(4): 1101-1112.

Calvimontesa, J., L. Massaroa, C. H. X. Araujob, R. R. Moraesa, J. Melloa, L. C. Ferreiraa and M. de Theije (2020). "Small-scale gold mining and the COVID-19 pandemic: Conflict and cooperation in the Brazilian Amazon." Extractive Industries and Society **7**: 1347-1350.

County Government of Migori (2023). County Integrated Development Plan for Migori, 2023-2027.

Crawford, A., O. Lyster and A. Rolfe (2020). Artisanal and small-scale mining (ASM) and COVID-19: Responding to the Pandemic. Ottawa, Canada, International Institute for Sustainable Development**:** 4 pages.

Davies, S. E., J. True and M. Tanyag (2016). "How women's silence secures the peace: analysing sexual and gender-based violence in a low-intensity conflict. ." Gender & Development **24**(3): 459-473.

de Haan, J. and K. Dales (2020). "Update 11: Impacts of COVID-19 on ASM: Insights from the ground " https://delvedatabase.org/news/impacts-of-covid-19-on-artisanal-and-small-scale-mining-insights-from-the-ground-1

2023.

Dworkin, S. L., S. Grabe, T. Lu, A. Hatcher, Z. Kwena, E. Bukusi and E. Mwaura-Muiru (2013). "Property rights violations as a structural driver of women's HIV risks: A qualitiative study in Nyanza and western Kenya." Archives of Sexual Behaviour **42**: 703-713.
Elias, J. and S. Rai (2015). "The everyday gendered political economy of violence." Politics & Gender **11**.
Ferguson, J. (2015). Give a man a fish: Reflections on the New politics of distribution. Durham, NC, Duke University Press.
Flor, L. S., J. Friedman, C. N. Spencer, J. Cagney, A. Arrieta, M. E. Herbert, C. Stein, E. C. Mullany, J. Hon, V. Patwardhan, R. M. Barber, J. K. Collins, S. I. Hay, S. S. Lim, R. Lozano, A. H. Mokdad, C. J. L. Murray, R. C. Reiner, R. J. D. Sorensen, D. M. Pigott, A. Haakenstad and E. Gakidou (2022). "Quantifying the effects of the COVID-19 pandemic on gender equality on health, social, and economic indicators: a comprehensive review of data from March, 2020, to September, 2021." The Lancet (British edition) **399**(10344): 2381-2397.
Hilson, G., S. Van Bockstael, T. Sauerwein, A. Hilson and J. McQuilken (2021). "Artisanal and small-scale mining, and COVID -19 in sub-Saharan Africa: A preliminary analysis." World Development **139**.
Human Rights Watch (2020). Kenya: Police Brutality during Curfew. Several dead, others with life-threatnening injuries. online, Human Rights Watch.
Jones, P. S., W. Kimari and K. Ramakrishnan (2017). "'Only the people can defend this struggle': the policits of the everyday, extrajudicial executions and civil society in Mathare, Kenya." Review of African Political Economy **44**(154): 559-576.
Kabiru, D. (2020). Pain and Pandemic: Unmaksing the State of Human Rights in Kenya in Containment of the COVID-19 Pandemic. Nairobi, Kenya, Kenya National Commission on Human Rights.
Kansiime, M., J. A. Tambo, I. Mugambi, M. Bundi, A. Kara and C. Owuor (2021). "COVID-19 implications on household income and food security in Kenya and Uganda: Findings from a rapid assessment." World Development **137**.
Kenya Human Rights Commission (2020). Wanton impunity and exclusion: A report based on human rights violations amid COVID-19 in Kenya (April - August 2020). Nairobi, Kenya, Kenya Human Rights Commission.
Kenya National Bureau of Statistics (2022). Kenya Demographic and Health Survey Fact Sheet: Migori County. K. N. B. o. Statistics. Kenya.
Kesar, S., S. Bhattacharya and L. Banerjee (2023). "Contradictions and Crisis in the World of Work: Informality, Precarity and the Pandemic." Development and Change **53** 1254-1282.
Kinyanjui, M. (2023). Mandera, Migori lead with most polygamous marriages. The Star. Kenya.
Kinyondo, A. and R. Pelizzo (2021). "How COVID-19 has affected Africa's Development." World Affairs(Spring): 58-76.
Meagher, K. (2022). "Crisis narratives and the African Paradox: African Informal Economies, COVID-19 adn the Decolonization of Social Policy." Development and Change **53**(6): 1200-1229.
Meger, S. (2015). "Toward a Feminist Political Economy of Wartime Sexual Violence: The Case of the Democratic Republic of Congo." International Feminist Journal of Politics **17**(3): 416-434.
Mezzadri, A. (2022). "Social reproduction and pandemic neoliberalism: Planetary crises and the reorganisation of life, work and death." Organization **29**(3): 379-400.
Mezzadri, A. (2022). "The Social Reproduction of Pandemic Surplus Populations and Global Development Narratives on Inequality and Informal Labour." Development and Change **53**(6): 1230-1253.
Mezzadri, A., S. Newman and S. Stevano (2022). "Feminist global political economies of work and social reproduction." Review of International Political Economy **29**: 1783-1803.
Mitullah, W. V., J. S. Ogola and J. M. Omiti (2003). The socio-economic impact of artisan gold mining in Migori District, Kenya. The Socio-economic Impacts of Artisanal and Small-Scale Mining in Developing Countrie. G. Hilson. Lisse, The Netherlands, Swets & Zeitlinger B.V.**:** 281-290.

Mueller, V., A. Ngunjiri, A. Rabbani, H.-L. Tan, N. Wu and K. Grépin (2022). "COVID-19 impacts on Women's well-being: Insights from a longitudinal study in Kenya." Gender & COVID-19 https://www.genderandcovid-19.org/resources/covid-19-impacts-on-womens-well-being-insights-from-a-longitudinal-study-in-kenya/ 2022.
Muthuri, J. N., A. Jain, A. A. O. Ndegwa, S. M. Mwagandi and N. D. Tagoe (2021). "The impact of Covid-19 on gold and gemstone artisanal and small-scale mining in sub-Saharan Africa: The case of Ghana and Kenya." Africa Journal of Management **7**: 121-147.
Osse, A. (2016). "Police Reform in Kenya: A process of 'meddling through'." Policing and Society **26**(8): 907-924.
Ossome, L. (2021). "The care economy and the state in Africa's Covid-19 responses." Canadian Journal of Development Studies **42**: 68-78.
Pape, U. and A. Delius (2021). "Livelihoods of Kenyan Households bear the brunt of the COVID-19 pandemic." Wold Bank Blogs 2021.
Perks, R. and N. Schneck (2021). "COVID-19 in artisanal and small-scale mining communities: Preliminary results from a global rapid data collection exercise." Environmental Science & Policy **121**: 37-41.
Pijpers, R. J. and S. Luning (2021). "'We have so many challenges': Small-scale mining, Covid-19 and constant interruptions in West Africa." Anthropology Today **37**(2): 10-14.
Rai, S. M., C. Hoskyns and D. Thomas (2014). "Depletion: The cost of social reproduction." International FEminist Journal of Politics **16**: 86-105.
Rai, S. M. and G. Waylen (2014). Feminist Political Economy: Looking Back, Looking Forward. New Frontiers in Feminist Political Economy. S. Rai and G. Waylen. London and New York, Routledge**:** 1-18.
Rutherford, B. (2020). "The Moral Politics of Gendered Labour in Artisanal Mining in Sierra Leone." Development and Change **51**(3): 771-793.
Salzinger, L. (2021). "Seeing with the Pandemic: Social Reproduction in the Spotlight." Feminist Studies **47**: 492-502.
Sjoberg, L. (2009). "Introduction to Security Studies: Feminist Contributions." Security Studies **18**: 183-213.
Smith, J., S. E. Davies, H. Feng, C. C. R. Gan, K. A. Grépin, S. Harman, A. Herten-Crabb, R. Morgan, N. Vandan and C. Wenham (2021). "More than a public health crisis: A feminist political economic analysis of COVID-19." Global Public Health **16**: 1364-1380.
True, J. (2012). The political economy of violence against women Oxford, Oxford University Press.
William, C. D. and E. S. A. Odhiambo (1992). Burying SM: The politics of knowledge and sociology of power in Africa. Portsmouth, NH and London, Heinemann, and James Curry.
Xu, Y., A. Delius and U. Pape (2022). Gender differences in household coping strategies for COVID-19 in Kenya. Policy Research Working Paper. Washington, DC, World Bank**:** 9959.
Zulaika, G., M. Bulbarelli, E. Nyothach, A. van Eijk, L. Mason, E. Fwaya, D. Obor, D. Kwaro, D. Wang, S. D. Mehta and P. A. Phillips-Howard (2022). "Impact of COVID-19 lockdowns on adolescent pregnancy and school dropout amoung secondary schoolgirls in Kenya." BMJ Global Health **7**.

UN Women. 2016. "Promoting women's participation in the extractive industries: Examples of emerging good practices". http://www.unwomen.org/-/media/headquarters/attachments/sections/ library/publications/2016/promoting-womens-participation-in-extractive-industries. pdf?la=en&vs=1955

[i] https://delvedatabase.org/covid-19-impact-on-asm/2022-covid-asm-global-survey; https://delvedatabase.org/news/delve-covid-19-impact-reporting-initiative-begins (accessed 19 May 2023);

[ii] With funding from *** removed for peer review . Research in Kenya was conducted by ** removed for peer review

[iii] For a detailed reading of the COVID 19 situation in Kenya, refer to COVID 19 Situation Reports – SITREP – from 1st may 2020 – 13 November 2021 available in https://www.health.go.ke/#1621663241218-5a50bcac-41da

[iv] It's back to school in Kenya after eight months closure – see https://allafrica.com/view/group/main/main/id/00075180.html.

[v] See also https://datatopics.worldbank.org/sdgatlas?lang=en (accessed 22 March 2024)

[vi] For a discussion of the politics of Luo burial customs, see William, C. D. and E. S. A. Odhiambo (1992). Burying SM: The politics of knowledge and sociology of power in Africa. Portsmouth, NH and London, Heinemann, and James Curry.

[vii] See https://delvedatabase.org/covid-19-impact-on-asm/2022-covid-asm-global-survey