THE GENDERED IMPACT OF MINING ON WORKERS AND MINING COMMUNITIES

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Acronyms

AMCU- Association of Mineworkers and Construction Union
BBBEE- Broad-Base Black Economic Empowerment
BEE- Black Economic empowerment
BMF- Benchmarks Foundation
CALS- Centre for Applied Legal Studies
COVID- Corona Virus
DMR- Department of Mineral Resources
FG-Focus Group
FGD- Focus Group Discussion
HIV/AIDS - human immunodeficiency virus/ acquired immunodeficiency syndrome
IDP- Integrated Development Plan
IMF- International Monetary Fund
IPILRA- Interim Protection of Informal Land Rights Act 31 of 1996
KZN- KwaZulu-Natal
LARC- Land and Accountability Research Centre
MACUA- Mining Affected Communities United in Action
MCEJO- Mfolozi Community Environmental Justice Organisation
MoU's- Memorandum of understanding
MPRDA - Mineral and Petroleum Resources Development Act
MSF- Médecins Sans Frontières
MSF- Médecins Sans Frontières/ Doctors without Borders
NGO-Non-governmental Organizations
NUM- National Union of Mineworkers
PGM- Platinum Group Metal
PPE- Personal Protective Equipment
PwC- Price Water House Cooper
SA- South Africa
SAHRC- South African Human Rights Commission
SANTEC-
SLP- Social and Labour Plans
STATS SA- Statistics South Africa
TB- Tuberculosis
TNCS- Transnational Corporations
WAMUA- Women Affected by mining United in Africa
WoMIN- African Women Unite Against Destructive Resource Extraction

Photos & Figures

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Executive Summary

Using a gender lens, this report highlights experiences of people working in, living close to, and affected by mines in South Africa. It is concerned with the gendered impact of mining on workers and communities across the country and zooms in on one case study in Mtubatuba in Northern KwaZulu-Natal (KZN) where Tendele Mine operates. It asks, what is the gendered impact of large-scale industrial mining on South African communities living around mine sites and on mineworkers?

The impact of mining is variegated depending on the geography, period, phase of mining, type of mining taking place and minerals being mined. There are, however, parallels in how, across time and space, working class people, in the workplace and in communities, experience the mining sector. In as much as our focus here is on the gendered impact, it is important to underscore that people's experiences are also mediated by race and class, amongst other social identity markers. This multiple lens approach, therefore, while not explicit throughout, informs this report and allows us to highlight the distinct ways in which working class, black women and men are disproportionately affected by the intersections of patriarchy, racism, and capitalism in mining.

When one reviews data on the gendered impact of mining on workers and communities there are glaring continuities and surprising discontinuities between the apartheid and post-apartheid periods. The continuities include the super-exploitation of black workers, the multiple costs (environmental, economic, cultural, and social) absorbed by working class communities near mines and labour sending areas and women. The discontinuities include the mass retrenchments since the early 1990s, the increase in subcontracting, and the entrance of women inside mines. Important to keep in mind is that the above continuities are sustained by a systemic (economic, social, political, and cultural) order that has not been fundamentally challenged, disrupted nor transformed for the benefit of the majority, since the end of apartheid. The racial, economic (class) and gender power, then, has remained intact with only cosmetic changes that serve to reproduce and maintain the underlying power structures, while giving the impression that change has come.

In tracing the gendered impact of mining on workers we start by looking at the ways in which the history of mining- particularly the preference for migrant male labour- continues to resonate today and shape workers' experiences. We highlight the gendered character of the deepening precarity and low wages of workers. We unpack what subcontracting means for worker rights and how the legislative shifts that have led to the inclusion of women in mining have challenged the masculine exclusivity of mines, even while leaving intact masculine normativity. What emerges from literature is that while mine jobs alleviate economic pressures, working in mines adds other pressures that are often gendered.

We then shift from the workplace to map the gendered impact of mining on communities. Mining deals seem to be characterized by lack of genuine consultation. Instead of consulting affected people, mines consult traditional authorities comprising mainly of men, thus leaving local people, and especially women, out of decision making about their lands and livelihoods. Even when nominal 'consultations' take place, the enduring negative social, economic, health, cultural and environmental (gendered) externalities are pushed under the rug. Communities- in particular black women and black working-class men- are then left to 'absorb' and navigate them on their own without much support from mines or the state.

In Somkhele, what seems to characterize people's experiences are dispossession, removal and displacement from ancestral lands, violent demolition of homes, exhumation of ancestral graves, unsympathetic reburials that ignore rituals, general disregard for the dead and ancestors, social relation and culture. There is also catastrophic environmental destruction. Crops and livestock are dying because water, soil and air are contaminated. Grazing fields are disappearing as the mine expands and marks as private property communal land. This has led to displacement of livelihoods and death of livestock. People interviewed and literature reviewed note generalized, unavoidable and lifelong negative environmental consequences such as the permanent contamination of water sources and destruction of soil, leading to dire food insecurity and poverty in mining communities. Additionally, toxic dust is leading to severe and debilitating health consequences such as respiratory diseases, especially in coal, gold, and asbestos mines. The impact of the above in communities is distributed in disproportionately gendered ways with women admittedly and evidently absorbing the shocks and externalities since they are socially and culturally tasked with care work and other domestic tasks such as providing food for the family and ensuring that the household sphere is functioning optimally.

The general sentiment from interviews and focus group discussions is that the mine has brought or heightened poverty of families that were once self-reliant. It is only the local petit bourgeois- the contractors, truck, and taxi owners, etc.- who are a minority who have benefitted. Even for them, their lives remain precarious and the cost they pay through their health, land and graves of ancestors is far higher than what they have been able to eke out through mine contracts. In many of the interviews we consistently heard people say, "They took our land and gave us R420 000, diseases, poverty, and a cleaning job". They asked, "how can the mine take away everything that fed us, and only give one person a contract job?" There is thus a resentment in the community, and it manifests in protests directed at the mine. These protests, both at work and in the community, have been marked by violence, intimidation of local activists and the assassinations of anti-mining and worker activists.

Considering the grave impact of mining on workers and communities, we hope that this report enhances discussions that seek to make visible lives and livelihoods under mining and contributes in a meaningful way towards holding mines accountable for the negative impact experienced by working class black men and women who interface with the mine.

1. Introduction

The question this paper attempts to answer is, what is the gendered impact of mining on communities and workers? By gendered impact we mean the ways in which actions of large-scale industrial mines differently affect men and women. To use a more succinct definition of gendered impact, we mean any impact or outcomes which, "though deriving from the same action or set of actions, have consequences, whether negative or positive, which are dissimilar across affected groups of men or women in degree and/or characteristics". Using this definition then, we highlight the different ways in which women and men are affected by mining, how advantage or disadvantage is spread between men and women; this in relation to workers inside the mine as well in the surrounding communities. The unambiguous focus on gender when delineating the impact of mining is an attempt to fill a research gap. While there is a significant amount of literature on the impact of mining on communities and workers generally, most of it tends to be gender blind or at best, to focus only on women. This study uses gender as its frame, meaning our starting point is to look at the impact of mining on both men and women.

When looking at the gendered impact of mining, it is important to consider that industrial mining in South Africa has a history extending over 150 years and it has been one of the country's most enduring economic sectors. With over 13 million people 'relying' on the mining sector in a country of 54 million, its significance cannot be overstated. Since the 1860s, with the discovery of diamonds and later gold, the sector has been critical in shaping the political, economic, and social landscape, fabric, and rhythms of the "South Africa society". The way this sector is organized has had enduring effects on race, class, and gender relations across the country and its various landscapes.

Mines have been known as a world without women, a 'protected' masculine preserve that legislatively and culturally excluded women until 2002 when legislation changed to incorporate women. Until 2002 women's exclusion was systematised and enforced through pass laws, influx control measures and prohibitions on movement and association. Women, therefore, except in asbestos mines, were absent from the core workforce and only visible on the margins of the mines as cleaners and nurses, and mining towns, mainly through their social reproduction work. While women are now included in mines, mines continue to be gendered organisations, meaning gender continues to organise and structure relations inside and around the mines, it is present in the ideologies, processes, practices that inform what goes on inside and around the mines- e.g. decisions about compensation, who the preferred labourers are etc.

To unpack the gendered impact of mining the framework we use here draws from and takes forward debates on the impact of mining on workers and communities and pays attention to gender, and to some extent, race, and class. Most importantly, the framework adopted invites us to critique the naturalised unequal gendered relationships between actors, it questions the marginalisation of women and the power imbalances. It takes seriously the historically predatory nature of mining, highlighting the environmental, social, cultural, and political impacts which are externalized to communities and workers, affecting their lives, livelihoods, culture and identities in disproportionately gendered ways. This is because mining does not affect everyone in the same way. Studies show that women, who are not a homogenous group, are disproportionately affected by mines compared to men. If indeed there are benefits to mining, women are the least likely to benefit compared to men, working class men are also least likely to benefit compared to middle-class and upper-class men. A gender lens, then, allows us to see these gendered differences in impact.

Tendele Coal Mine is arguably one of South Africa's largest open-pit anthracite coal mine. It is surrounded by several villages in and around Somkhele. These include Dubelenkunzi, Machibini, Myeki and Siyembeni villages, all under the Mkhwanazi Traditional Authority Council known as Mgezo. In Somkhele, it began its open-cast operations in 2006 and has for the most part relied on contract labour, embroiled in legal battles with activists in the communities where it operates.

This report is structured in the following way: we start by looking at the gendered impact of mining on work- both paid and unpaid. To make sense of the current gender dynamics in mining workplaces, we draw from the history of mining which is deeply masculine. We then look at community level starting with land dispossession, displacement and resettlement, the environmental and health impact of mining on people's lives and livelihoods and how people respond, and finally the different resistance tactics deployed. In all these sections we demonstrate how gender is central and thus an important lens through which to understand the impact of mining. Violence is a central theme that frames much of the report.

2. A note on methodology

This research report draws on available literature on South Africa largely, and fieldwork conducted in and around Somkhele, near Mtubatuba where Tendele Coal Mine operates in Northern KwaZulu Natal (KZN). The Somkhele case study is an attempt to zoom in and layer the literature with concrete examples from people's experiences i.e., those affected by mining. The definition used to describe 'affected' people is the one used by local people, one that takes into consideration the direct and indirect, short, and long-term effects of mining on this generation and future generations' lives, livelihoods, culture, and identity.

To identify research participants, we used purposive sampling and chose participants based on whether they had been 1.) displaced and or relocated by the mine, 2.) proximity of their (current or previous) homes to the mine 3.) whether they and/or their descendants/ancestral graves were affected by mining activities 4.) whether they currently or previously worked for the mine. All participants were from the affected villages of Dubelenkunzi, Machibini, Esiyembeni, Myeki and Luhlanga, all in and around Somkhele.

In total, between January and February 2022, we conducted 20 semi-structured in-depth interviews - 11 with men and 9 with women. All the interviewees were active in different local formations or worked closely with NGOs supporting local movements such as MCEJO, Macua/Wamua and Action Aid. We complemented these interviews with two focus group discussions (FGDs). The first FGD had 16 participants; 7 women and 9 men all from the communities mentioned above, all living or lived in less than 10 kilometers from the mine. The second focus group discussion had 1current worker and 5 ex-workers, all men. Majority of the respondents from both the in-depth interviews and focus group participants were unemployed (+15), retired (+4), self-employed (4 men) and recently retrenched (+8), others were elderly and had never been employed, though they worked in their family fields farming for sustenance and to sell. The recently retrenched people worked as cleaners (2 women) and as guards & general labourers (6), , all hired by contractors operating at Tendele mine. The self-employed FG participants serviced the mine by providing transport to workers; two others owned local business and one was a traditional healer. Only 1 of the participants was currently employed and he worked for a contractor.

The limitation of the study is that at Somkhele it was difficult to get current employees of either the mine or contractors who were willing to speak to us. The current workers we approached were afraid to speak about their work experiences citing likelihood of intimidation and victimization by contractors, traditional authorities, and the mine. It was mainly recently retrenched workers who were willing to speak about their experiences as workers.

Fieldwork and interviews were preceded by consultations with 12 people in different organisations that are familiar with and currently operate and organise or have operated and organized in the area. These were the Land and Accountability Research Centre (LARC) (2 women), MCEJO (1 man), All Rise (3 women), ActionAid (1 man and 1 woman) and Macua/Wamua (2 women and 2 men). The consultations were mainly a) to get advice on the field visit we were planning from people who were familiar with the environment and had wide networks in Somkhele, b) to get access to the communities and people who live around where Tendele mine operates, c) to get a sense of local power dynamics and politics on the ground since there are ongoing court cases and activists have been targeted by hitmen, thus making the situation on the ground quite volatile and at times dangerous.

We came to classify the 20 in-depth interview participants into the following categories; (i) the people who were displaced and given money to build new homes on their own (3 men and 3 women) (ii) the displaced and relocated people who were not given money, instead the mine built them homes (1 men and 1 woman) (iii) directly affected by the mine but resisted displacement and relocation under the current compensation terms, and thus never relocated (4 women and 5 men) and (iv) broadly affected by mining operations (3 men). While the third group has not been physically displaced, their lives and livelihoods have been deeply affected and disrupted.

The 20 interviewees and 22 FGD participants allowed us to get a wide and in-depth sense of people's lives and experiences before mining, during the development and production phase. FGDs helped us to get a broader sense of local narratives and experiences about the impact of mining. All interviews and the FGD were conducted in isiZulu. They were later translated and transcribed to English.

More than half of the participants (in depth interviews and FGDs) were pro-mining when the mine first arrived in their area. According to these participants, this was because they were promised jobs for all adults wanting to work in the mine, and development for their area especially the building of roads, hospitals, and big houses for displaced families. A sizable number, however, indicated that from the get-go they were skeptical and, on the fence, because some of their questions about relocations, graves and benefits were evaded by the mine and the local indunas (headman/chiefs). Some of these people were affected by the mine even during the prospecting phase. A smaller group, both from in depth interviews and the FGD, was against mining from the start and these were mainly well-off local families that either had huge pieces of land and were productively farming those pieces of land and had livestock grazing from the land that was being earmarked for the mine, were already elderly and were attached to their ancestral homesteads and lands, and found it objectionable to relocate ancestral graves and traditional houses for a mine. Due to political volatility in the area and non-response on interview requests, we did not get to interview mine officials, trade unions and traditional authorities. As a result, assertions made about work and workers is drawn from other case studies and available literature. To protect our participant's identities, throughout the report we use pseudonyms and not people's real names.

3. Paid and Unpaid Work: Working conditions

3.1 Preference for male, migrant and low wage workers

From the onset of industrial mining in South Africa, the incorporation of labour was a gendered process, mines preferred an exclusively male workforce. They also preferred that the workforce be sourced cheaply, paid low wages and that it be a migrant masculine labourer who would then be housed in overcrowded hostels. Most of these migrant workers came from the Southern Africa region especially Lesotho and Mozambique. In fact, for a long-time mines were known as a world without women, even in occupations that were considered feminine. This male labour preference and exclusion of women was promoted through legislations such as the South African 1911 Mines and Works Act and the South African Minerals Act of 1991. These laws ensured that the workforce was exclusively or predominantly men, apart from Asbestos mines. According to McCulloch (2003) women were allowed in Asbestos mines because of the relatively simple method of extraction and people working in family units. The numerical dominance of men and the masculine culture in mines were therefore active constructions of the state and mining capital.

Considered one the dominant employment sectors in South Africa, the mining sector provided jobs to over 200,000 workers in the late 1920s and to 500 000 by the 1950, and 760 000 jobs by 1987. These numbers declined in the early 1990s, especially of permanently employed workers, as more and more mines started restructuring, retrenching, and subcontracting labour in response to global shifts in mining. By 1994 for example, South African industrial mines only had about 480 000 permanently employed mineworkers and 450 000 by 2010. As there was preference for men, most of these jobs were taken up by men in permanent employment and later by subcontracted men. From 2002, however, women started being employed in mines, even though mine culture remained masculine. Their inclusion was celebrated in some circles and resented in others, especially because it happened at the same time as mass retrenchments of scores of workers were happening and because women's inclusion challenged the hegemonic masculine culture of the mines and masculine exclusivity of the mineworker identity. According to the 2020 Mining Council of South Africa facts and figures there are currently 451 427 workers directly employed by the mines and another +500 000 are employed indirectly through subcontractors. Out of the slightly more than 1 million mineworkers in South Africa, about 63 101 of them are women.

Photo 1: Mineworkers approaching a cage that takes them underground. Source: Asanda-Jonas Benya

The gendered implications of this brief history of mining are numerous- their preference for male migrant workers who were paid poorly and housed in overcrowded hostels, subjected to a highly violent masculine mine culture. Firstly, the preference for men did not necessarily benefit working class men who toiled in mines in dangerous conditions, but it benefitted mining capital that could extract surplus value from the labour of the exploited workers. The low wages and deplorable working conditions meant that even the men who got mining jobs were highly exploited and paid wages that did not allow them to reproduce themselves or sustain decent lives and living standards for themselves and their families. This had major implications for families as wages earned in the mines could not be relied upon to support families. Women in labour sending areas, as a result, had to supplement these low wages, and socially reproduce their families with little assistance from the mineworkers. The preference for migrant labour meant that families were separated to sustain the mining industry and women in most cases had to be the main and only caregivers - thus making it difficult for them to be free to engage in any other form of wage labour far from home. The male preference also meant women could not get mining jobs even if they wanted to. This exclusion also produced the highly criticized masculine character of mines and mine culture which valorises hegemonic masculinity and its accompanying traits such as risk taking, violence etc. - traits that research has proven time and again to hurt men. This legacy of mining continues to inform the gender scripts that operate in mines, mine culture, and the masculine habitus of the workforce. It is an important background to the gendered impact of mines on workers and communities.

3.2 Subcontracting, retrenchments and decent work deficit

As alluded to above, the rise in retrenchments and subcontracting have fundamentally reshaped mining in recent years. This was mainly due to changes on the global economic market, a stagnant gold price, the decline in the quality of easily accessible gold deposits and the quality of iron ore. In 1987 and 1999, for example, gold mines retrenched about 50% of their workforce, from about 500 000 to 240 000 workers. In the diamond, platinum, coal sectors similar trends of retrenchments leading to a decrease in direct employment and rise in subcontracting can be observed. Most recently in 2018, GoldFields retrenched about 1560 of their workforce. In 2019 Sibanye-Stillwater, after their acquisition of Lonmin, retrenched 5270 especially those working for contractors.

In all these cases, shortly after closure of shafts or merger of mines, retrenchments almost always follow, then subcontracting. Subcontracting has become a cheaper way of organising production for the mining companies as it relegates some of the responsibilities, including statutory obligations, to third parties who often ignore or undercut legal, labour, health, and safety requirements. What is particular about the recent rise in subcontracting is that it is core mine work that is being subcontracted - not non-core or specialised work and it is becoming a norm, rather than exception in mining. This means that practices of mining companies that are 'leaders' in subcontracting - a pervasive employment trend in mining globally - will in the next few years define employment relations and set the standard for working conditions and how mining companies engage with trade unions (by extension workers) and the state.

Photo 2: Mineworker installing support underground. *Source: Asanda-Jonas Benya*

3.3 The gendered impact of retrenchments and subcontracting

What then are the experiences of subcontracted workers that are shaping employment relations and how does it impact on workers and communities? With retrenchments and subcontracting, research overwhelmingly demonstrates a roll back in worker rights, a return of past insecurities, undermining of worker representation as legitimate unions get displaced by compliant unions who are closer to employers and protect employer interests' than workers. Exploitation, bad working conditions and arbitrary dismissal have become the order of day for subcontracted workers. Without unions and voice and not much associational power, their bargaining power has drastically been reduced and their workplace citizenship compromised. There is a lot of documented evidence showing higher levels of income insecurity for subcontracted workers. Some of that evidence bolsters claims that subcontracted worker either get paid less than their permanently employed counterparts or do not get paid regularly or do not have a clear basic wage or at worst, do not get paid at all when production targets are not met (Bezuidenhout 2009). While direct mine employees can refuse to work in unsafe places without compromising their jobs, subcontracted workers who refuse to work in places they deem unsafe can easily lose their jobs, especially because they do not have legitimate unions to represent them. With subcontracted mineworkers there is thus the increased pressure to meet high production targets at all costs, including 'willingly' working in places that are not considered safe - just so that one is paid their wage - low as it may be at times. This has meant that unsafe working conditions get normalised for subcontracted workers and the Mine Health and Safety Act (1996) is disregarded as workers are forced to take risks, ignore dangers, and relentlessly pursue production targets or risk having their contracts terminated or wages withheld.

What then is the gendered significance of these experiences? By virtue of men's numerical dominance in mining, the above working conditions and experiences of subcontracting are mostly endured by male workers and to a marginal extent, women. The super-exploitation associated with subcontracting plays out in gendered ways on the shop floor. This is also confirmed by our interviews with subcontracted workers who worked Tendele mine.

Below are quotes from workers and ex-workers that demonstrate their precarity at Tendele as employees of third-party labour brokers. To demonstrate the precarity of subcontracted worker one ex-worker told us about how she was fired without any reason. She said: "They (contractor) just asked us to sign letters saying we agreed to be retrenched and we will be called again in the future should more jobs opportunities arise. I refused, I said not after we gave them (Tendele) our land. He said the deal was already concluded we should just sign…They told us they would deactivate our fingerprint identification so we can't enter the gate." (ex-workers, 26 January 2022). Other examples speak of the limit in worker rights for subcontracted workers. While striking is allowed for all workers under the South African Labour Relations Act 66 (1995), Section 64- when procedure is followed- for contracted workers these rights are limited by the contractors who employ them. A worker noted for example that "... In 2013 we had a strike to get salary increase from Duma Manje (contractor). The mine called cops on us, and I got arrested. I was then fired from my job, and I was told that it was because I had been arrested. I am very unhappy about the mine" (focus group discussion 2, 27 January 2022)".

In recent years, much like what is described above around mine closures and retrenchments, Tendele mine and their contractors have been retrenching workers. For example, in 2020 they retrenched about 400 workers from their 1334 staff complement. While exact numbers of contract workers at Tendele are hard to come by, they are more than permanently employed

workers. Permanently employed workers are estimated to be less than 20% and mainly comprising of those in white-collar occupations. Not only are contract workers not hired by Tendele, but their contracts keep moving between different contractors to a point where some do not even know who their *real* employer is. Some worker told us about how he only saw from the change in the design of the pay slips that their employer had changed, no one had bothered to tell them that their contract was being transferred to another contractor. Another noted how they are continuously changing between contractors for reasons unknown to them despite being promised that they will be moved to work directly for Tendele mine. They said "I applied to work at Tendele after we gave up our land. But I was never employed by Tendele. I applied and was hired by SANTEC in 2010, I worked until 2012. In 2012 I moved to Duma Manje for a year… I was working for another company until they retrenched me a few months ago" (ex-worker, 26 January 2022). Much of the experiences shared by interviewees resonate with literature; these ranged from being arbitrarily fired, limited rights at work, not having a clear and consistent basic salary, no access to personal protective equipment from the employer, not having a clear contract stipulating employment conditions, no access to worker benefits or being represented by an independent union.

So while Tendele prides itself with having "80% of their employees come from surrounding areas", most of these employees are hired by contractors and not directly by Tendele mine and they do not enjoy all of the benefits that are often linked to permanent contracts. In the case of Tendele mine, this raises questions of "what kind of jobs are being created? who do they benefit? are they secure? do they lift communities or families out of economic deprivation? Do jobs live up to the promises made to people? If the mine relies on contractors who, by design mainly evade labour legislation, do not give workers all employee benefits and security, surely these jobs need to be interrogated from both what they profess to provide and peoples experiences with them. The cases in this report show the dire and gendered impact of the consequences of subcontracting on workers and their families.

Continuing with the gendered impact of mining using the lens of subcontracting it become evidence that, while the daily impact of at subcontracting is mainly felt by male workers on the shopfloor, the effects and practice of disregarding health and safety goes beyond the workers and their bodies, and affects their families, their women counterparts and communities. This is because subcontract workers who suffer from occupational diseases or who get injured hardly get compensation for occupational diseases and are often unable to access mine hospitals for treatment or get independent health care advice through doctors if they have developed occupational diseases. In such cases, it is their wives or women relatives who get roped in to do care work and nurse the sick workers back into health. Sometimes this is done at a great risk and cost to the women; the risks can include exposure to the diseases and the costs can include having to sacrifice participating in income generating activities to care for the injured and 'discarded' subcontracted worker. In the case of transmittable mine diseases such as tuberculosis, communities, and women who are the primary care givers of the sick workers get affected because workers often also repatriate the disease itself thus affecting families, communities and especially the women who care and nurse them. With more precarity and insecurity in mining, more and more workers will be condemned to the fringes of the mining labour market and will get jobs working under contractors, in such cases their families/communities and women relatives will act as shock absorbers of health externalities as the example above demonstrates.

The gendered impact of subcontracting, therefore, varies as outlined above. In the context of workplace subcontracting, it is mainly men who bear the brunt of super-exploitation and

insecurity. Outside of work, however, this impact is externalised to families in disproportionately gendered ways and women carry significant risks and costs by virtue of gender roles and distribution of work in the household. The extent of the impact of subcontracting on women in the workplace is slightly different because of their minority status. So far, we have focused on the impact of mining on men within the workplace. Below we outline the impact of the inclusion of women in mining. While the lived realities of men and women differ, the theme of precarity and insecurity at work because of gender persists.

3.4 Women mineworkers and a legacy of masculinity

The time when mines started retrenching workers and using contract labour was the same time when conversations about including women started. To date, about 63 101 women currently work in South African industrial mines, that is about 14% of the mining workforce. Most of these women joined around 2004 when the sector was on the decline and re-organising through the retrenchment and subcontracting, as mentioned above. That means the inclusion of women was marred with 'celebrations' and controversies.

Figure: 2020 Women in mining workforce

Industry	***No. of women employees***	***% of women employees***
PGMs	21 103	13
Coal	13 828	15
Gold	12 281	13
Chrome	3 156	17
Iron Ore	3 342	16
Diamonds	2 001	15
Manganese	1 887	15
Industrial minerals	1 675	14
Non-ferrous metals	2 862	16
Other minerals	966	18

Source: Department of Mineral Resources and Energy and the 2020 Facts and Figures

What sparked the shifts was the political transition from apartheid to post-apartheid and the necessity for and pressure on the mining sector to contend with its past and fundamentally transform itself to reflect the 'new' South Africa and include, in various ways, those it had systematically excluded especially in terms of race and gender. To this end, exclusionary mining legislation such as the 1911 Mines and Works Act No. 12 and the South African Minerals Act of 1991 were repealed and replaced by the Mineral and Petroleum Resources Development Act (MPRDA 2002) and the Broad-Based Socio-Economic Empowerment Charter (Mining Charter 2002). These legislative pieces became the bedrock of women's inclusion in mining. The Mining Charter in particular set explicit targets to encourage the entrance of women into mining jobs. One of these targets was a 10% quota on the participation of women in mining with a specific timeframe of five years from promulgation (i.e. from 2004). While not a welcomed change, these targets meant mines had to reimagine their workforce and actively bring in women.

Photo 3: Women mineworkers underground a mine shaft. *Source: Asanda-Jonas Benya*

The gendered impact of the inclusion of women in mining is variegated. On the one hand it seems and is viewed as positive. On another hand it reveals the recalcitrant masculine culture that defines mines- regardless of their gender sensitive rhetoric- and how that masculine culture affects the ways in which women mineworkers experience work- rendering minework non-liberating. In the first instance, mine culture continues to be characterised by violence, collective disregard for danger, valorisation of masculinity and risk taking behaviour, racial and gender solidarity amongst male workers to the exclusion of women even though they are legislatively included. In fact, the 10% quota that has been set has further entrenched the tokenistic treatment of women, reinforcing women's marginalization, their treatment as second-class citizens with only some "workplace rights" and responsibilities. In other words, the masculine workplace culture that remains recalcitrant has not enabled a full inclusion of women as intended by legislation. Women continue to face incessant sexual harassment, pregnancy continues to be stigmatized, alienation of women from work and exclusion from teams continues to mark women's experiences. At Tendele mine for instance we were told during the focus group discussion that women did not do core-minework, they were not involved in core- production activities, but supplementary work that mimics what they do at home such as cleaning. In a one-on-one interview with Thando who has recently been retrenched, she told us that she was hired as a cleaner and was later asked to informally do filing but continued to be paid as a cleaner.

On the structural front, the lack of change houses for women in some mines, the unsuitable Personal Protective Equipment (PPE) for women's anatomy, patriarchy at work and not being taken seriously by the gender-blind unions, and the pervasive sexist ideologies of women's domesticity in mining all mark women in ways different from how men experience work, whether directly employed or subcontracted.

On the other hand, and in the context of high unemployment and poverty, mine work has been welcomed as a mechanism through which poverty can be alleviated and some economic

pressures taken off women. The reality, however, from women mineworker's experiences is that while it alleviates the economic pressures, working in the mines that are stubbornly masculine and patriarchal adds other pressures. These pressures include, but are not limited to the multiple and constant experiences of sexual harassment that women mineworkers report, including a number of reported rape cases and murder of women inside mines, the compromised mental health and emotional strain that women are subjected to as the minorities in mines that valorise men and masculinity. These experiences of women mineworkers, which often get buried under the much popular narrative of employment.

These experiences require that we ask difficult questions about the gendered impact of mining on women and their bodies, it requires that we juxtapose the temporary alleviation of economic pressures with the lasting impact of the sector on women and their bodies. The ways in which mines therefore impact women needs to consider not only the wage that women get, but their experiences in totality, including the masculine culture women have to navigate daily in mining, their second-class status, their daily experiences of exclusion and marginalisation by workers, employers and the unions. Most worrying are the experiences of sexual harassment that is not taken seriously due to the masculine character of mines, the rape and murder of women (case of Pinky Mosiane 2012; Thembelani mine case, 2015; the case of Cynthia Setuke's 2014) at Aquarius mine in Rustenburg. These experiences are particular to women as the minority and recent recruits in mining and due to the fact that they denied the privileges associated with men who are seen as legitimate - albeit exploited, workers. Despite these experiences by women, the number of women employed in mining has been rising. However, this remains marginal as a percentage of the total mining workforce.

3.5 Invisible workers: Women's unpaid work

The post-apartheid legislative inclusion of women in mine work emphasises women's participation and visibility in paid formal minework. There is also the invisible social reproductive work that women have played in mining communities for years. Women who do this work are inestimable. This is invisible yet critical work for the renewal of the mine labour force. It is daily work that ensures the maintenance and reproduction of the capacity of mine workers to labour. It is not simply 'housework', but work that directly benefits mines. It is the work that enables workers' to perform at their best at work, and hence maximise the production of surplus value for the mines.

These roles have been played by women generally, and in mining communities without any remuneration for years. They include servicing mine workers - feeding them, looking after them when injured or sick due to work, keeping them warm, feeling safe and loved and taking care of them emotionally and psychologically - and indirectly assisting in producing a surplus value for mines. All this work done by women enables mineworkers to remain productive workers. They are not only done by women who are wives, but girl-children too are roped into these tasks at an early age, sometimes leading to the compromise of their education, their development and freedom and at times their mental well-being- as Mama Zembe's case below demonstrates.

Text-box:

Mama Zembe: Our eldest daughter had to take care of the two-month-old baby so that I could focus on my husband, take him to the clinic, bathe him, feed him, and tend to his needs during that period". My husband got so sick that he even struggled to walk on his own. He still worked because the mine insisted, and we needed money. Some days I would

walk him to work. His condition got worse, and the mine fired him. Initially they promised that another family member could replace him since he was a directly affected person who had given up his land for the mine… I sent my CV so many times, but they did not hire me. Until today, no family member has taken up my husband's position... My husband was never compensated for falling sick at the mine. They just dumped and abandoned him even though he was part of the directly affected and relocated families. I had to pick up the piece and put them back together again. My daughter was very helpful in taking over some tasks in the household when I could not… it affected her at school, she was not the same person". (Interview with Mama Zembe, 24 January 2022).

As demonstrated above, this social reproduction work is gendered and disproportionately affects women, as they have to negotiate it daily, though they are unpaid for it. As the text box above demonstrates, this work not only sapped Mama Zembe's time but her energy and took away her autonomy and restricted her. In fact, it became her pre-occupation, it shaped her daily rhythms and relationships. It was unpaid work that was externalised to her – without consultation – by the mine / contractor. She still cannot look for jobs away from home because she has to take care of him. It took away household resources that were already stretched. She has to use their savings to seek medical help while the mine which had contributed to his ill-health – got away scot-free. This work, as literature demonstrates, was directly because of her husband's mine work. It is not only wives who do this social reproduction and care work, but other women too such as female siblings and relatives, mothers, and daughters. This is the cost of mining on bodies, children, workers, on women's time and resources.

Photo 4: A woman coming from fetching water with a baby on her back. *Source: Asanda-Jonas Benya*

4. The violence of Mining: Capitalism, patriarchy, and racism

The history of mining in South Africa is blighted by multiple forms of violence. As many scholars have argued, violence is mining in endemic and manifests in different ways including structural, symbolic and interpersonal where it affects the daily lives of workers and communities affected by mining. The prevalence of violence in mining has historical roots. Inside the mines violence was ubiquitous and formed a critical part of mining masculinity. Violence informed how workers experienced work, how teams were organized and how work was performed and endured daily. This history of violence inside the mines helps us make sense of violence that continues to define mining, experiences of workers, especially the violence that targets women workers such as sexual and reproductive violence, sexual harassment, and also gender-based violence which is especially high in mining communities, and finally the violence at community protests or worker strikes.

The violence which characterises the mining landscape should be viewed as tied to the social, economic and political factors in the broader society, it is a means to defend the distribution of power and to challenge or reconfigure it. Violence in mining is also a part of the strategy of capital and patriarchy to protect the status quo underpinned by violation of women. Violence in this context is used to protect and advance existing values of patriarchy and capitalism grounded on undermining women.

In mining communities, people have argued that violence is 'routine', structural and defines their experiences. From literature, structural and symbolic violence manifests in different ways in people's lives. Take for example the effects of coal dust on people's health, contamination of crops, having only dirty or no water in the entire community because mines have either redirected or contaminated water sources, the emergence of diseases that people never (or minimally) experienced before, the violence of blasting that has left people fearful as their houses crack and homes crumble to the ground, the dissemination of communities as neighbours pack up and leave due to the closing in of their lives by the mines. People's experiences of dispossession and displacement, as the Somkhele case shows, are marked by violence. The violence of mining is not only at the structural level but also identity and heritage as people's identities, cultural heritage are undermined by decisions of the mines, leading at times to the destruction of cultural and heritage symbols. The climatic changes that are felt on a visceral level and have become a pocketbook issue due to their impact on food production and prices etc. all speak to structural violence of mining. This violence defines people's lives, it determines their life chances and life expectancy.

There is also the physical violence. For example, in one of the informal settlement communities in the platinum belt the police reported that they record at least one murder per week. This community occupies a space adjacent to mine shafts. There are several such examples in mining communities. There is also the violence that targets people who either oppose mining or who want better resettlements deals with mines. These activists, especially when demanding that due consultation process be followed, have been subjected to violence even to the point of being murdered. Community activists in social audits and community reports also detail incidents of bullying, intimidation and violence directed at them by mine security personnel, mine officials, the police and local *inkabi* (hitman). A report by the South Africa Human Rights Commission found that all those opposed to the resettlement deals proposed by mines and those opposed to mining reported being threatened with violence and death, intimidation for not agreeing to resettlement deals or "proposed compensation agreements" (SAHRC, 2018:19).

These are not merely 'allegations of harassment' but have resulted in harm and death of activists e.g. Bazooka from Xolobeni in Mpondo land and Mama Fikile in Somkhele.

The physical, structural and symbolic violence noted above often play out in gendered ways both the workplace and communities. At work, the violence of mine work and exploitation, the violence of exposure to harmful gases and inhumane working conditions, the low wages are disproportionately endured by men by virtue of their numbers, location in the workplace hierarchy and occupations they occupy. On the other hand, the violence of exclusion and marginalisation, sexual harassment and gender-based violence, murder, rape is mainly endured by women. During strikes, physical violence targets men while gender based and symbolic violence targets women. As Chinguno's (2015) work demonstrates, in strikes to forge collective solidarity which is often undermined by capital, symbolic violence serves as a form of intimidation targeting women workers. In communities, intimidation, physical threats of violence and assassinations target all, but women are disproportionately affected and thus exposed to more violence. This is because women in mining communities they tend to be on the front lines of community struggles against mining. In ccommunities there is also the sexual and reproductive violence directed at women and young girls. Rape figures in mining towns, as the MSF report shows, are incredibly high while health services are scarce and far, particularly in the informal settlements which form a significant part of the mining landscapes in South Africa. The violence of mining, therefore, while wide ranging if one takes into consideration the different ways it plays out both at work and in communities is clearly gendered. This is significant if one is to consider mitigation strategies to address and prevent the different forms of violence.

Photo 5: Workers on the Marikana hill where workers were massacred in August 2012.
Source: Asanda-Jonas Benya

5. Land Dispossession, displacement and resettlement

5.1 Aversion to consultation

Literature emerging out of South Africa and the continent identifies multiple cases of dispossession, displacement, forced removals and forced resettlements as being common in areas where mineral deposits have been found and earmarked for mining. Some studies argue that dispossession and displacement have become synonymous with mining; from Makhasaneni and Somkhele in KwaZulu-Natal, to Mokopane in Limpopo, and Luka in Rustenburg and elsewhere on the continent. This is another kind of violence endemic in mining areas and it too has gendered implications and is psychological and emotional.

Like other cases, the Somkhele case demonstrates the easy coupling of 'development', dispossession, and displacement. A recurring theme in interviews is the lack of open consultation of local people prior to the mine's arrival. In most of our interviews people recounted stories of being informed, but not consulted, by the local *indunas* (headman or chiefs) about the mine's arrival. Others went further to say that after being informed, they were told they would be moved and indeed they were forcibly removed and sometimes relocated to distant and uncultivatable lands far from water sources, and local infrastructure. Instead of full consultations with all residents, only men of the area were called to the meetings and informed about the impending operations.

Baba Silas from Dubelenkunzi noted that "There were people from eMgezo (traditional authority office), they came to tell us that the mine was coming here. They told us we will be moved but those who don't want to move can stay, however, the mine will come… I was forced to relocate because when they (local chief) came to tell us about the mine, they had already agreed with the mining company. They brought a map to show us where the mine would operate, our land was already on this map. I don't remember anyone asking us for our land, they just came to tell us what was going to happen". (Interview with Baba Silas, 24 January 2022). Another villager from Machibini, Baba Malanga noted that "When we heard about their arrival (from neighboring villages), we came together as a community and went to the chief. We told him we were grateful for development that the mine was bringing. But we also told him that the approach of the mine was not good as they had not consulted us ... We asked the chief what their agreement was with the mine regarding our land. The chief said there was no agreement, he will call a meeting once there is an agreement" (Interview with Baba Malanga, 25 January 2021).

Sentiments expressed above came up regularly in interviews. Locals remarked that they had not been consulted prior to the arrival of the mine. Instead, they were partially informed, and no consent was sought -hence none given, prior to the mine operating. The fact that laws which govern mining and mining rights were for a long time ambiguous and did not explicitly make consultation and consent a mandatory and enforced legal requirement nor grants communities the full and explicit rights to refuse mining left people vulnerable. To strengthen the rights of people, legal practitioners say that the Mineral and Petroleum Resources Development Act 28 of 2002 (MPRDA) needs to be read alongside the Interim Protection of Informal Land Rights Act 31 of 1996 (IPILRA). The MPRDA ensures consultation while the IPILRA enables the affected rights holders to give or withhold consent. A recent decision (2020) by the North Gauteng high Court has shifted the dynamics around consultation and consent and has affirmed the right to say no. The judgement emphasised the need to respect the interests of affected communities in decisions regarding mining projects. Recent amendments to the MPRDA also

extend the definition of "mine communities" and stress "meaningful consultation" that enables people to make informed decisions regarding the impact of the proposed mining activities.[1]

In Summary then, despite not being consulted nor giving consent, some people admitted being initially excited about the arrival of the mine because of the promises (jobs, schools, roads, etc.) that were made by the mine. Some respondents remarked that "At first, we did not want to move, but then they promised us jobs and employment for the rest of our lives". "We were only employed as cleaners… under contractors" (ex-workers, 26 January 2022). Others, however, mentioned being skeptical initially and being against the mine after operations started displacing people off their land. Those respondents who opposed the mine and mining reported coercion and ostracization by the chiefs and local elites who stood to benefit from mining. Gogo Madlomo's experience is very instructive on how people were moved, whether they supported or opposed mining.

***Text Box**: Gogo Madlomo prefab home*

> *"My house was where the mine plant is located now. Initially they said we were not going to be affected or moved. After a while, they started erecting a fence right in my back yard. It moved right through my house. …On the day they removed us, I was outside mixing building material. They said I must stop what I was doing and pack up. It was surreal, we packed up quickly. They demolished the first house, the second one until all houses were flat on the ground… It was all done is a rush and we had no say in the matter. They gave us one cargo container to live in before they built the houses. I vehemently resisted. How could they expect me and all my male and female children and grandchildren and our house contents to fit in one cargo container? They eventually gave us 2 cargo containers. The containers were so hot to live in, there was no ventilation. It was hard. We lived in the containers for 1.5 months while the mine built the houses in the meantime. They decided on the plan and the size of the house. They decided on everything, they did not consult. The houses they built were smaller than our houses that they demolished. Not only did they remove our houses, but they also removed our family graves as well. That is what hurt the most. (Interview with Gogo Madlomo, 25 January 2022).*

Gogo Madlomo is still struggling to come to terms with the relocation and the way it was carried out and the long-lasting impact it has had on her family, their identity and relationships with neighbour.

While Tendele mine in their press releases argues that they are in dialogue with families who are refusing to be relocated, what our research found was that the 'dialogues' were in fact one sided instruction sessions where families were told what the mine was prepared to do and not do. A "take it or leave it attitude" by the mine representatives was reported by families

[1] The amendments now read as: "applicants for a prospecting right, mining right or mining permit are required to *engage in meaningful consultation with landowners*, lawful occupiers and interested and affected persons and such meaningful consultation shall be conducted in terms of the public participation process prescribed in the Environmental Impact Assessment Regulations (EIA Regulations) promulgated in terms of section 24(5) of the National Environmental Management Act 107 of 1998 (NEMA). The office of the Regional Manager is also authorised to participate in the meaningful consultation process, as an observer, to ensure that the consultation by the applicant is meaningful and in accordance with the Amended Regulations; and….in addition to holders of prospecting rights, mining rights and mining permits having to give landowners and lawful occupiers of the relevant land at least 21 days' written notice of the commencement of operations in terms of section 5A(c) of the MPRDA, they are also required to submit such notice to the relevant Regional Manager within the 21-day period and must include proof of service to the landowner and lawful occupier.

interviewed. It has gotten to a point where some family homesteads have been completely encircled (see photograph below) by the mine and no dialogue is taking place. Families, mainly comprising of elderly women living with grandchildren, have been intimidated, put under duress to move, their health exposed to risks and while livelihoods are being displaced daily. The cases below demonstrate the sheer disregard and intimidation of families who refuse to move, as oppose to the dialogues the mine emphasises.

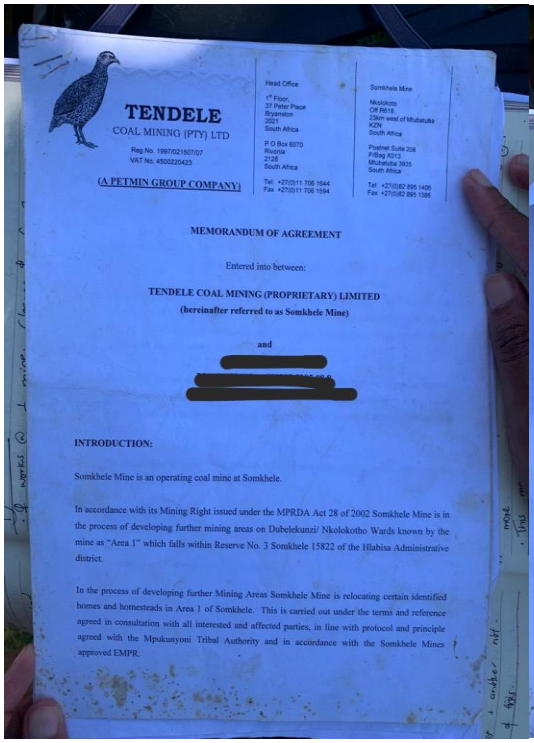
Photo 6: A homestead completely encircled by a mine. *Source: Asanda-Jonas Benya*

Text box 3: My ancestral land is now the mine's 'private property'

Baba Cango: My mother called and told me that there were people fencing parts of our land, our crop fields. I was in Durban; I then returned and spoke to the headman. He told me that the mine was preparing to start operations and that's why they put fence. He then said I should relocate or else we would be affected by dust. I refused, I told him nobody explained anything to me, I did not know there was a mine coming and that our land would be taken. Then I went to speak to a white man at the mine, he asked me to prove to him that the land was ours, he asked me to produce a title deed. That's when we started to fight. I told him to show me the agreement he got from the chief, that gives him permission to fence around our crop fields. He could not produce that…. (*Interview with Baba Cango, 25 January 2022).*

Makhulu Cango: I asked them how they could come and put fence without talking to me and my son. My son is the one in charge of this household because I am an old woman now. They said they will speak to him. They removed our fencing and they did not say a word to me. (Interview with Makhulu Cango, 25 January 2022).

Ingonyama Trust Act of 1994 which governs most of the land under the custodianship of traditional leaders in Kwa-Zulu Natal nominally recognizes ordinary citizens as the customary owners of the land who should give consent prior to any operations on their land. However, as the quotes above demonstrate, this was not the case in Somkhele. The mine was imposed on them, and some were forcibly removed and strategically displaced from their ancestral lands.



TENDELE
COAL MINING (PTY) LTD
(A PETMIN GROUP COMPANY)

MEMORANDUM OF AGREEMENT

Entered into between:

TENDELE COAL MINING (PROPRIETARY) LIMITED
(hereinafter referred to as Somkhele Mine)

and

[redacted]

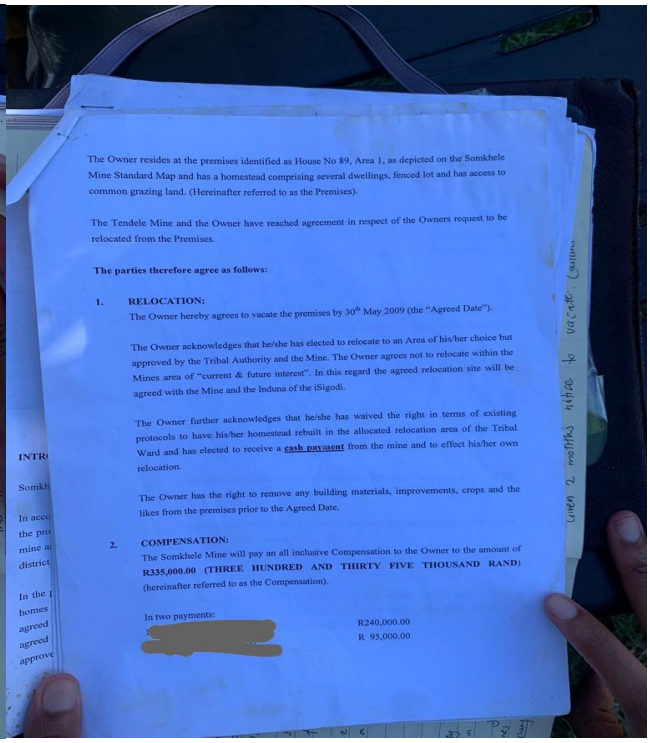
INTRODUCTION:

Somkhele Mine is an operating coal mine at Somkhele.

In accordance with its Mining Right issued under the MPRDA Act 28 of 2002 Somkhele Mine is in the process of developing further mining areas on Dubelekunzi/ Nkolokotho Wards known by the mine as "Area 1" which falls within Reserve No. 3 Somkhele 15822 of the Hlabisa Administrative district.

In the process of developing further Mining Areas Somkhele Mine is relocating certain identified homes and homesteads in Area 1 of Somkhele. This is carried out under the terms and reference agreed in consultation with all interested and affected parties, in line with protocol and principle agreed with the Mpukunyoni Tribal Authority and in accordance with the Somkhele Mines approved EMPR.

Photo 7: Dispossession: From Dubelenkunzi
Source: Asanda-Jonas Benya.



The Owner resides at the premises identified as House No 89, Area 1, as depicted on the Somkhele Mine Standard Map and has a homestead comprising several dwellings, fenced lot and has access to common grazing land. (Hereinafter referred to as the Premises).

The Tendele Mine and the Owner have reached agreement in respect of the Owners request to be relocated from the Premises.

The parties therefore agree as follows:

1. **RELOCATION:**
The Owner hereby agrees to vacate the premises by 30th May 2009 (the "Agreed Date").

The Owner acknowledges that he/she has elected to relocate to an Area of his/her choice but approved by the Tribal Authority and the Mine. The Owner agrees not to relocate within the Mines area of "current & future interest". In this regard the agreed relocation site will be agreed with the Mine and the Induna of the iSigodi.

The Owner further acknowledges that he/she has waived the right in terms of existing protocols to have his/her homestead rebuilt in the allocated relocation area of the Tribal Ward and has elected to receive a **cash payment** from the mine and to effect his/her own relocation.

The Owner has the right to remove any building materials, improvements, crops and the likes from the premises prior to the Agreed Date.

2. **COMPENSATION:**
The Somkhele Mine will pay an all inclusive Compensation to the Owner to the amount of **R335,000.00 (THREE HUNDRED AND THIRTY FIVE THOUSAND RAND)** (hereinafter referred to as the Compensation).

In two payments:

[redacted] R240,000.00
R 95,000.00

Photo 8: A Memorandum of Agreement with names of male. members of the household.

The lack of genuine consultation of the community by local chief has meant that only the political elite and a select few- usually men- get to make decisions about mining deals. With communities excluded from decision making about mining, women are even more so due to not being invited even to the pseudo consultation processes organized by the local traditional authorities and mines. This exclusion of women from consultations has implications for how compensation works and who benefits. They are effectively written off and not recognized as legitimate owners as mines only focus on and only recognise men. Tendele mine, for example, is on customary land, that is, on land under the custodianship of a chief where people do not have title deeds (men or women) but have the right to use and inhabit the land. What the mine has done in all the memorandum of agreements we saw, they only recognised men as "owners" and thus only 'beneficiaries' of the meager compensation paid out. This is despite the mine purporting to recognize all "interested and affected parties". This non-recognition and exclusion of women has implications for gender relations within the homestead and after relocation. It undermines adult women and relegates them to the status of children who fall under the headship of the male on the memorandum of agreement. It also means they have little to no say in how compensation funds are used when rebuilding the new homestead because they are not recognized as the legitimate or equal "owners" of the homestead.

5.2 Flawed Compensation

The state is obligated by the MPRDA Section 54 and IPILRA Section 2 (3) and the Constitution Section 25:1 to put in place prerequisites that minimise the impact of mining on affected communities and to make provision for payment of "appropriate compensation" in cases of loss or damage or deprivation of a right to land, including due to mining related activities. One of the requirements is that directly affected communities must be relocated and moved away from hazardous sites before and during operation, fair compensation paid and when mines close, there must a rehabilitation of the environment. While people are moved away as the cases above show, they are not paid a fair compensation, even the little that is paid is not paid to women. As already indicated above, in more than 10 Memorandums of Agreement's we saw between families and the mine, women did not appear as beneficiaries.

In some cases mines blatantly refuse to account for losses such as loss of communal grazing and farming land (SAHRC). In Somkhele families reported the undervaluing of their communal grazing lands, crop fields and the houses in their homesteads. Baba Mncinci, for example, who had been growing sugarcane for twenty years in "crop fields big enough for our needs" lost his fields. He asked for a R50 000 compensation, but they only paid him R15 000, an amount equal to what he used to make with only two truckloads of sugar cane in a season. A rondavel that costs over R25 000 to build and close to R50 000 including rituals performed before, during and after it is built were rated at R7000 by the mine. This value disregarded the fact that rondavels are built differently, serve different purposes, belong to different ancestors, and have different costs- that cannot be compromised- associated with them.

While Tendele reports paying households an overall minimum of R400 000 with an average of R750 000. Our research discovered that some families were paid below the minimum reported by Tendele and in fact the R400 000 reported as a minimum seemed to be an average. For homestead relocations, figures in the Memorandums of Agreement we saw were between R335 000 and R450 000. The compensation included *induna* (headman or chiefs) site fees, access to new site, site clearing, levelling of plot, fencing, kraals and enclosures, costs of relocation, rebuilding of replacement accommodation, sanitation, moving transport costs, up-set allowance, cost of future amenities and services, costs of traditional practices and rights relating to the relocation, loss of ALL fields, crops and related improvements and all other costs and claims of whatsoever nature. The Compensation offered, despite what mines report and believe, was less than half what people needed to effectively move and was below what is considered appropriate in terms of global sector standards (SAHRC).

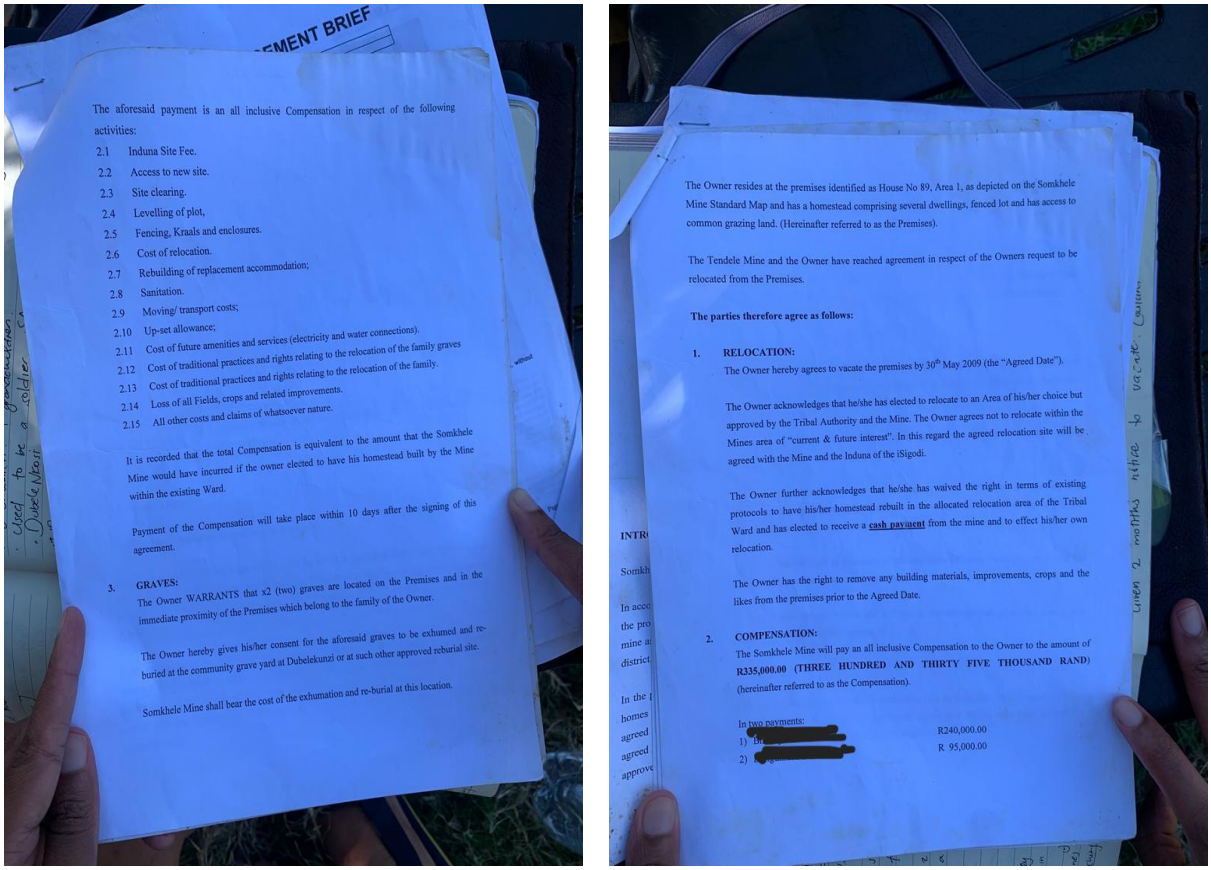


Photo 9: Memorandum of Agreement stipulating what the R335 000 compensation covered.
Source: Asanda-Jonas Benya

While the South African Human Rights Commission report argues that communally held land must be included when relocating people, this has not happened in most cases cited in literature. As a result, the relocations result in "loss of agricultural or grazing land" and massive divisions within communities when common ground cannot be found. What seems common are reports of "secret agreements" between traditional authorities and mining companies about communal land. These deals and agreements have left communities destitute, divided, and poor. Traditional authorities have "facilitated dispossession and relocation of communities without people's consent and with inadequate compensation".

People at Somkhele and other mining communities do not receive fair compensation for the harmful impact caused by mines or the relocation. The SAHRC argues that this is the case because in South Africa there are no culturally relevant and sensitive guidelines for calculating fair compensation. As such, people's human and cultural rights, those of their ancestors/deceased relatives are usually abused. "For compensation to be meaningful; it should account for, inter alia, loss of life, loss related to communal and individually held tenure or title, as well as loss incurred for production value gained from the land, whether that production value is linked to traditional ways of life, or more commercial enterprises" (SAHRC, 2018:3). Until mines relocating people do that, they cannot claim to be fairly compensating people for losses and long-term harm caused by mines. The gendered impact of compensation, when the only recognised owners in Memorandum of Agreement are men, are quite dire.

As mentioned above, even when the meagre compensations are paid to families, women hardly ever are counted as legitimate recipients of compensations. In fact, they are not even mentioned as people entitled to compensations, only the so-called heads of households are targeted. These

practices have even dire consequences for women headed households and can lead to a further dispossession by male relatives who are called to sign on as owners. This compensation pattern reproduces gender inequality and perpetuates women's exclusion from property ownership and financial decision-making.

5.3 Grave exhumation and unsettled spirits

Literature is replete with examples of not only forced removal of the living from the lands of their ancestors, but also the violent exhumation of graves by mines in communal lands earmarked for mining. People in community reports and social audits recount stories of watching on while headstones of their parents and ancestor were being violently damaged by the mines. In Somkhele we saw a newly constructed communal grave site were the mine bundled up people's remains, and left graves unmarked for years to a point where families no longer know which graves belong to them. Families interviewed who had graves removed all expressed grief and discontent about the way in which the graves of their ancestors were removed. "We did not want the graves to be removed. We had never seen something like that before. It was traumatic. They did not bring coffins, yet they promised they would. They did not put tombstones as promised, today I can't even identify the graves. They wrapped dead bodies and bones in plastic bags and after re-burying them, they wrote the names of the deceased on a piece of plastic. Over time the plastic disappeared and now we can't tell whose graves they are" (Interview with Baba Silas, 24 January 2022). As exhumation took place people were deeply traumatized to a point where some left the exhumation sites before the process was completed and did not witness the traumatic reburial of their relatives. This only made identifying graves later even more difficult if not downright impossible. The markers that some managed to put up also disappeared and since there were constant promises to immediately put-up headstones, they did not see the need to put permanent signs to mark their relatives' graves.

Photo 10: Unmarked graves in Somkhele near the mine. *Source: Asanda-Jonas Benya*

Baba Silas whose mother and aunt were exhumed saw "pieces of bones" and another person who was "still intact… a skull with long hair". He kept saying "we were watching all of this while they disentombed them…. We were *made* to watch all of this". This brought back memories of the day the two people were buried. These were some of the harrowing stories that people told and they emphasized the mine's disregard for their emotional and psychological wellbeing as they conducted the exhumation. The use of heavy machinery to dig, the possibilities of dismembering the bones, leaving traces, what they *called igazi or amanzi,* of the deceased on the land that would be mined and processed.

Because of the way in which the process was carried out, Gogo Madlomo said she "could not even watch, I simply collapsed when they started digging the graves, I could not watch. I also have spirits of the ancestors in me, I could not handle it, it was too painful…They went alone to bury the bones elsewhere, none of the family members went with them. It was bad, we have never seen anything like that" (Interview with Gogo Madlomo, 25 January 2022). Interviewed people whose graves were removed argued that the experience not only left them traumatised and unsettled but displeased their ancestors since rituals were not performed prior to exhumation.

The rituals were not performed because the mine did not give people time to do them or a fair compensation to carry out all the rituals. In fact, some people were only paid for their graves after they were removed. Additionally, the monies paid to families did not take into full account all the rituals that families must perform, per grave, before and after exhumation of bodies and when the dead are being reburied. In the focus group discussion 1 people remarked that "We were given R18 000 per household for our graves and told that we will get R7000 from Mgezo". This R18 000 did not consider the costs of rituals per grave, erection of tombstones and ceremonies. It was paid per family regardless of the number of graves exhumed. The other R7000 they were promised never saw the light of day. The costs associated with rituals include a goat to announce the exhumation, then a goat and a cow to re-bury the bones. When a person is exhumed, culturally it is not only their bones that are taken but as much of the soil under and above them since that too is believed to carry their spirit. Because none of these rituals were performed and observed, people in Somkhele believe that the spirits of their ancestors are wondering around and continue to haunt them. Instead of proper compensation for graves, what the community saw were bulldozers entering their spaces without any due consideration to the significance of graves or observance of rituals that should be performed before a rondavel or grave is moved. Instead of considering all the ceremonies that people have to perform before moving graves and demolishing houses, mines unilaterally demolished homes.

While reports state that the mine has since apologized, the scars in the community remain and no psychological support was given. The culturally insensitive and inappropriate process of grave removals speaks directly to the violations of people's cultural rights and these violations are perpetrated by mines before they start operating and during operation. While the land can be partially 'rehabilitated', the violation through grave exhumation cannot be reserved (SAHRC, 2018:3) The graves are undervalued and overlooked by mining companies when relocating people. Yet the trauma people are subjected to after the exhumation of their relatives remains for long. Because this trauma is invisible and this violence not directed at the living, mining companies get away with little to no confrontation on this form of violation.

The biggest fear expressed both in interviews and at the FGD was around burial sites for people who die now while some families await relocations. Baba Cango said "My worry is that, should

someone in the family die today, where will the person be buried? I worry because we are planning to relocate as soon as we agree on a fair amount with the mine… it will be hard to bury someone today knowing we may need to exhume their bodies soon. The uncertainty worries me a lot" (Interview with Baba Cango, 25 January 2022).

The traumatic impact of the grave exhumation on the entire community was palpable- men and men we spoke to were deeply affected by the experience of exhumation and neglect of graves by the mine while marking- and therefore claiming- the grave site as part of their private property. That the new graves were located so close to a mine (as the photo above demonstrates) is also a contentious issue and community members believe that it gives no rest to the ancestors and further adds to their restlessness and the unsettled spirit of the community. The dispossession, displacement and trauma of relocation noted above are not the only ways mines have impacted people's lives and livelihoods. The environment has been negatively affected in a variety of ways. Below we delve deep into what environmental destruction resulting from mining looks like, specifically in Somkhele and other communities around South Africa.

6. Contaminated Lives: The environmental impact & implications for livelihoods

6.1 Dust and diseases

Text box impact of dust on Household

"We need to cover everything. We cover food, water, furniture, everything because if we don't, everything becomes black when the wind blows from the mine. When you do laundry and you don't bring it in on time, you must wash it all over again. I don't even want to talk about cleaning, we sweep about 5 times a day. It is a lot, we never used to clean like this before the mine came. Our water is polluted, you open the tap, and the water is black. We eat and drink coal and we get sick. Our children get sick, we are spending more money on medication, we must take them to the doctor more regularly, that's transport and medication. We can't even use any traditional medicinal plants for flu and fever because they all covered in coal. Nothing grows anymore, the dust kills all the plants." (Interview with Mama Moya, 27 January 2022)

Because of the state's failure to implement environmental protection measures, mining communities have been exposed to dust and other toxic emissions produced by mines, smelters, dust blows and tailing dams. Literature on mining and mining affected communities demonstrates an increase in the rate of collectively experienced respiratory diseases. These range from high levels of asthma, sinusitis, lung cancer, skin diseases, respiratory organ failure, silicosis and tuberculosis. Even in communities with decommissioned mines, research shows that people continue to suffer from eczema (due to lead and uranium exposure), respiratory illnesses due to continuing damage to the lungs by inhaling silica and coal dust, exposure to radiation and dangerous chemicals in waste dams and landfill sites located in mining communities. These effects not only compromise people's present health status but have future health and economic implications as some people cannot work in sectors that require fully operational lung capacity and the next generation is infected with degenerative diseases.

From Tendele mine's fact sheet, the community's toxic dust exposure is presented as part of the 'historical context' in Somkhele, not a current reality. They state that, monthly, they bring independent experts to conduct "rigorous" dust monitoring in the local community to measure dust from the mine. From these independent experts, dust levels are within normal range. This

contradicts what we saw and what was reported by community members living close to Tendele mine. Those who live in the communities complained that daily they are exposed to and inhale toxic dust. Mama Malope remarked that "You should come here before they blast... After blasting, there is a thick and long-lasting dark cloud of dust that covers this entire area...You sweep and sweep and sweep and sweep after they blast… We are always coughing and sneezing. My grandchildren have got sinuses and asthma, something we never knew about or had before in this family. We are forever going to the clinic because they are coughing. We must take care of them when they are sick and can't go to school". In addition to the extra workload of sweeping and cleaning for hours on end, there were health hazards that grandmothers directly attributed to the 'thick cloud of dust'. They remarked that their grandchildren were getting sick at a rate higher than what they were used to. A woman in the FGD mentioned that "Our children are all sick, they have been inhaling this dust since they were born... I don't think our children will reach our age group, they will all die young, if the mine is still here... Even if we were to run away from the area, we are already infected." The idea of the future and the impact of coal on peoples' health in the present and future, was of deep concern across all generations.

We also heard of a family with 3 children who have all been diagnosed with TB. The grandmother remarked that the family is spending more now on medical and related bills than ever before. The cost associated with sick children included several doctor's visits per month, transport to the hospital, medication, and children missing school. A local taxi owner who was a part of the FGD also confirmed that he knows of families that go to the clinic several times a month due to respiratory related health issues. This was new business for him, and he linked it directly to the mine.

The impact of dust on the bodies was also recounted by children. In several interviews, grandmothers called their grandchildren to testify about the impact of dust on them. Children talked about sore and watery eyes, painful chests and throat, runny nose, headaches, the sinus, and their play time being disturbed by blasting times since they must stop playing and run into the house for cover and miss school because they are sick. Findings in Somkhele, therefore, confirm what is reported in literature on the gendered health impact on communities and workers.

The daily care work of the sick is done by women, it is women who plan for a child to reach the clinic when they are sick, often at a great cost (monetary and emotionally) to them. They are the ones who nurse back to health all those who get sick due to mine dust- sometimes exposing themselves to health risks and contagious illnesses. As dust blows into homes, it is women who clean up five times a day, cook fresh meals if food sources get contaminated by dust or who find clean sources of water. It is their time that gets eaten up by the daily activities that ensure families are safe and clean. These activities define women, they control how they spend their time and resources. None of the environmental protection measures put in place relieve women of this extra work demanded of them.

Men who worked in the mines also get affected by dust as the medical diagnoses below demonstrates. The ex-workers we spoke to all had chest problems, some more severe than others. In some cases, it was these respiratory problems that contributed to their discharge from work. Baba Xoxa and Mama Zembe recounted stories of having to use us all their family savings to look for medical assistance. Because they were both contract workers, they did not have access to medical insurance/aid and the employers did not want to pay for their medical bills even though their respiratory problems were as a result of mine work. Men's direct

interface with mine dust, therefore, renders them more susceptible to severe and debilitating respiratory diseases.

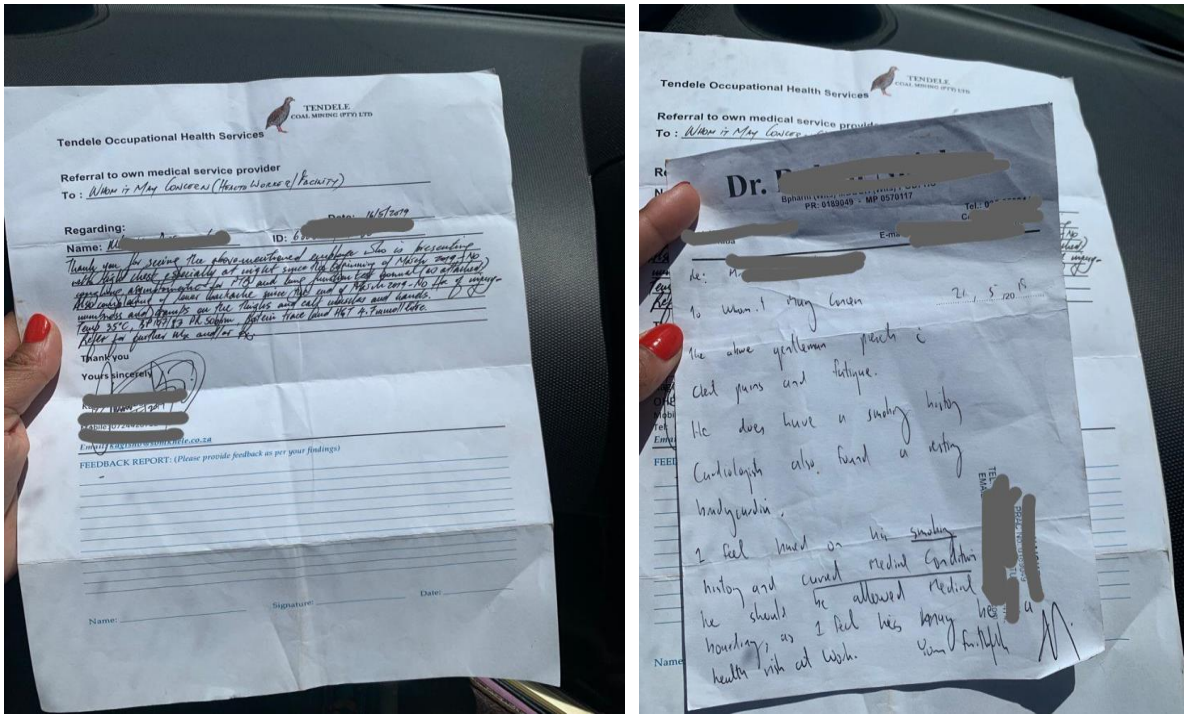


Photo 11: Doctor's letters confirming chest pain diagnosis *Source: Asanda-Jonas Benya*

6.2 Drinking from the well of death: contaminated water and food insecurity

Exposure to toxic dust has a negative impact not only on people's health, but their livelihoods, access to clean water and food security. Research shows and our photograph below confirms that people who live in mining communities, especially coal mining, are unable to plant their own food since dust emissions leave plants contaminated with coal dust. With women, and especially grandmothers, being the main household crop farmers and small scale food producers, undertaking subsistence farming – (are also in charge of cooking)- a contamination of crops affects them most as they have to make do without their sources of livelihood e.g. vegetable gardens, and make other plans to feed their families. This increases their daily workload and exposes them to vulnerabilities as they go out to look for other sources of food and sustenance.

Photos 12: Crop leaves contaminated with coal dust. *Source: Asanda-Jonas Benya*

Mines have a responsibility to protect water sources from contamination, yet reports and literature show that the level of water contamination caused by mining is extensive both during operation and after mine-closure. Water damage due to chemical pollution- or other hazardous substances- impacts not only humans but aquatic life, wildlife, and the environment generally. In Somkhele livestock (goats and cows) die of drinking poisonous water. Other respondents reported plant growth that is stunted because of bad water and air quality. "Our water is polluted… there is not clean water source… you open the tap, and the water is black. We eat and drink coal and we get sick", said one FGD respondent.

Photos 13: Livestock grazing close to the mine

Source: Asanda-Jonas Benya

Photo 14: A goat that died from drinking contaminated water exuding a distended stomach

The produce of small-scale farmers nearby mines is also greatly compromised due to lack of clean water availability. In Somkhele all local small-scale farmers interviewed have completely abandoned farming and have had to find other means of sustaining themselves because of compromises productivity. This has contributed to high and rising food prices, compromised access to adequate and nutritious food thus poverty. Lack of water has forced some farmers to rethink their identities which were shaped by histories of family farming.

Research also suggests that where there is water, it is contaminated due to acid mine drainage. In other cases mines are redirecting water and blocking communities encircled by water pipelines from access. The contamination of water sources has meant that poor people must buy water for daily consumption or use contaminated water (eg. Luka village in Rustenburg). In Somkhele a respondent said "we used to collect water from a stream close by, the streams have gone dry, and we have to walk long distances to get water…We cannot use rainwater anymore because it is contaminated with dust. We can't even use it for bathing. We sometimes hire a bakkie to help us collect water… it costs about R500. You need to have jerrycan containers you can tightly close to store your water, and these containers are expensive." (Interview with Mama Zembe, 24 January 2022). Water contamination then gives women extra shifts of housework, it is an extra expense that gets absorbed disproportionally by women who are mainly involved in household activities that need water. At the height of COVID it was a public health issue that played out on the domestic stage entrenching health vulnerabilities of women.

Considering that South Africa is under great water stress with water shortages more pronounced in mining, poor and rural communities for reasons stated above, water access and availability becomes a justice issue, not only basic need. Some mining areas have been marked as having "critical water shortages". Despite mining locales being marked as water stressed, mines continue to use much of the local water in their operations leaving locals destitute. A conservative estimate by Price Water House Cooper (PwC) in 2021 was that the mining sector uses about 2.5% of SA's available water sources. Due to this water stress in mining communities, SLP's, such as the Somkhele SLP's, make provisions for clean water supply for communities. While water provision is underscored in SLPs and mines claim to build dams in communities where they operate, there is very little evidence from social audits conducted in mining communities that water is being provided.

Water contamination, scarcity and redirection issues are not only environmental, but fundamentally gendered. Water shortage especially in poor communities directly affects women as it increases the amount of time they spend looking for and fetching drinking water from distant wells and rivers or from municipal water tankers.

6.3 Impact on land-based livelihoods

Most of the communities where mines have recently relocated to were pastoral or agricultural communities prior to the arrival of mines. Mines changed these livelihood activities when lands were dispossessed and water sources contaminated. In Somkhele this meant that people could no longer farm as before or keep the number of livestock they kept before. People reported 'starting to lose goats' after the mine started, and when mine rangers were retrenched. "We started losing goats, most died inside the mine from drinking contaminated water" and other said their livestock was "falling and dying in the trenches dug by the mines" (Focus group discussion 1, 26 January 2022).

Many interviewed talked about no longer being able to farm on new plots of land where they've been relocated to. For Baba Silas who survived by farming corn, sweet potato, green vegetables, goats, cattle, and chickens and had "enough land with water" his livelihood was compromised after he was forced to relocate to a place far from water sources. Those not relocated mentioned changes in the vegetation of the area soon after the clearing of nearby forests by the mine. Mama Moya who used to grow mielies, sweet potato, green vegetables and had goats, cattle and chickens said that she could not grow anything in her back yard anymore, the fruit trees stopped bearing fruits. She remarked "I stopped growing fruits and vegetables because nothing grows anymore. I used to grow lemons, oranges, peaches, granadilla, and avocados. This started long ago but was most pronounced in 2017. Now we buy fruits from the shops, and we can't afford most of them." (Interview with Mama Moya 27 January 2022).

A 2019 World Bank report states that "nearly 25% of all of South Africa's high-value arable soil (100 million hectares), may be *irreversibly* damaged by coal mining thus harming agricultural land. This is also confirmed by data from the Centre for Environmental Rights (2014) which shows that land used for coal mining can *never* be used for crop growing even after rehabilitation. In other words, the effects of coal mining are not only dire, but also enduring and cannot be addressed even at closure or by rehabilitation. Rehabilitation that is often done by mines tends to be more cosmetic landscaping, than a full revival of the ecosystem to enable productive activities. This devastation has had direct impact of food security and food sovereignty of communities. It has undermined food production, produced food insecurity and thus chronic hunger. It has effectively manufactured poverty in mining communities. The impact is gendered as it is often women who must make plans to feed their families in the context of destructed land and soil, contaminated water sources etc

Box: Baba Cango who had a lot of livestock prior to mining said

> *"Our animals are dying in the mine, the rocks fall on them, or they get hit by trucks. In the past month alone, I have already put claims for four goats, and they refuse to pay the amount that I claimed for. They say the chief decided how they should be compensated for losing livestock. Between 2006 and 2018 I have lost about 200 goats, 36 cows. The mine has only paid for two and even then, they only paid R10.000 for a cow, and R2000 for a goat. Yet these animals were not worth that on the local market… Some animals die of drinking poisonous water, others are hit by trucks and other get stuck in mud inside the mine." (Interview with Baba Cango, 25 January 2022)*

Not everyone is equally affected by the environmental impact of mining. Above and in literature one gets a sense of the gendered, racialised, and classed character of the impact. While the wealthy and privileged rip the benefits, black rural and peri-urban, poor people and women absorb the shocks. These include working longer and harder to sustain families. It also means spending less time resting and taking care of one's self. This has direct consequences on health, bodies, and quality of life for all, but especially women who are the main caregivers- by virtue of their gender roles- in the context of the devastating impact.

These groups have historically been disproportionately burdened by the environmental impacts of mining while simultaneously being denied access to the benefits of mining. Mining companies then have unfairly distributed the environmental hazards on communities based on race, gender, and class. There are many examples in literature from South Africa that demonstrate the ways in which race, class and especially gender influence how the environmental impact is unduly spread across communities. An example of the uneven

allotment of the environmental impact is that of communities in and around Soweto where a study found that out of the +600 decommissioned mines, majority have not been rehabilitated causing water and air pollution. The water and air in these areas remains contaminated by mercury, uranium, cyanide and silica dust, chemicals that pose serious health risks to people, especially the elderly and children. The devastation is *daily and long term*, and the impact is gendered and racialised and is felt even when best care is taken from exploration to de-commissioning stage.

It is therefore not only the health and safety of workers that is greatly compromised by mining activities, but that of exposed and affected mining communities- near and far. The extent of the negative impact of mining on the health of workers and community members demonstrably extends beyond the fatalities to affecting children and the future wellbeing of communities. The health externalities detailed above have the capacity to diminish the health and quality of life of people living downwind, up and downstream, and in close proximity to mines sites.

The damage to land and soil is not only of communities but also extends and affects areas declared protected where we have seen a number of project being proposed or commencing e.g. the Mabola Protected Environment in Mpumalanga, the Wild Coast in the Eastern Cape. In areas like KZN, Eastern Cape and Limpopo indigenous forests and mountains have been removed and access to coastlines restricted to explore and mine.

6.4 On noise and vibrations

Other effects include noise pollution caused by blasting, traffic and accidents caused by trucks moving raw material and equipment in and out of the mining sites. Similar to other communities such as Phola township near Ogies in Mpumalanga, Somkhele villagers bemoaned the noise that disturbs their sleep and family social activities. A mama in the village noted: "It is so noisy at night, we can even tell when the different work shifts start and end, you would swear we work at the mine". For Baba Cango, his children no longer visit the village because they cannot play outside due to the dust, they cannot watch the television inside due to the noise, they cannot have parties outdoors because it gets too dusty and that ruins food. Their lives when visiting the village, Baba Cango remarked, are "constrained and miserable".

The mamas all talked about blasting and vibrations that lead to cracked walls, ruined foundations, collapsing houses and broken windows. In most documented cases mines have not repaired or rebuilt the cracking houses. Instead, communities have been blamed for using material that is supposedly "not strong enough". The SAHRC (2018:5) argues that "prior to conduction blasting operations, appropriate safety mechanisms" need to be put in place to prevent property damage- with due consideration given to the quality and types of structures in surrounding communities". Mines have neglected this call.

The noise from, and vibrations caused by blasting have not only compromised peace in communities, but it has also had an impact on connections between the living and their ancestors. In Somkhele for example, some locals drawing from African traditional knowledge system believe that the noise level displeased and disturbed their ancestors, causing their spirits to wonder around due to the heightened noise levels in the community and blasting vibrations. This, in African traditional belief system leaves communities vulnerable without the protection of ancestors.

Photo 15: Cracked houses with corrugated iron windows. *Source: Asanda-Jonas Benya*

6.5 Impact on Health

Based on the literature and people's lived experiences above, when referring to the impact on mining on people's health the focus needs to be both in the workplace and in the community. There is overwhelming evidence that demonstrates the ways in which mining compromises people's health; be they workers or people living in or near mining communities.

In the workplace the health impact can be assessed by looking at reported and unreported injuries, fatalities, and occupational diseases. On fatalities, the World Bank (2019:43) notes that some of the "world's worst mining accidents have happened in the Southern African region" and in particular South Africa. In 2018 SA mining industry had about 2350 injuries and 81 deaths. Other health effects include exposure to lethal silica dust, wet and hazardous working conditions which have resulted in workers contracting diseases such as tuberculosis and silicosis. In Southern Africa there are over 500 000 former miner workers who are currently sick and dying of silicosis and TB directly related to their work in the gold mines in the 1960-1990s. mineworkers generally, data shows, suffer "the highest rate of TB of any working population in the world", especially those who have worked in goldmines and increasingly in coal (World Bank 2019:40). In South Africa the figures go up to 2,500 – 3,000 miners and ex-miners per 100, 000 people compared with only 834 out of 100,000 people in the general population. It is not only worker who are affected but children too. Research by affected communities and the World Bank demonstrate that in areas near mines and in mine dumps rate of asthma, wheezing chest and runny nose congested nasal passages and post nasal drip is higher compared to others who live far from mines. These diseases compromised and affect their future job/work prospects as some work sectors require 100% lung functionality.

These high and pervasive rates of TB they are not treated by mines but in public hospital. The burden of care is shifted by mines to state resources that should be caring for the public. Most worrying is that after being discharged from work, the sick and dying miners go home to be cared for by their female relatives and wives. Care work, as literature shows, is all-consuming

and involves times sacrifice by women that sometimes translate into a loss of income or earning opportunities. This care work is done without any financial assistance from the mines where the worker contracted the disease. As such, families- in particular women who are socially obligated to do the invisible care work - end up carrying the burdens associated with diseases and disability- from management to treatment. In other words, the burden of care work for the sick and dying miners is externalised to women in mining communities or labour sending areas.

Because TB is contagious, when extended family members contract it, they too become the burden of women within the household. The impact of occupational diseases therefore is felt in the household and disproportionately by women. Mama Zembe's case in Tendele demonstrates the above clearly. Her husband (a contract worker at Tendele mine) got critically sick- respiratory disease- due to the nature of his job. Barely 2 months after giving birth, she had to care for a critically ill husband whose health was rapidly deteriorating while her eldest daughter-12 years old at the time- took care of the 2-month-old baby.

Text box: Sick contract worker in Somkhele who contracted TB

Baba Zembe: My family was worried that I would die and leave them with no money. It was bad, I was unable to do any work. I struggled breathing; I had no energy. I would get tired and feel lots of pain. My wife was not able to do all the household responsibilities while taking care of me. My children were worried, they could see I was sick and had changed. I was not even able to play with the kids. I slept most of the time…. Medication helped because now I don't have to stay in bed all day like before. I can do light tasks around the yard. If I did not have a wife, it would have been hard, I don't know who would have taken care of me. My wife had just given birth, she had to stop breastfeeding and look for ways to generate income while caring for me. (Interview with Baba Zembe, 27 January 2022).

Several workers we spoke to had similar experiences to Baba Zembe. Once they got sick, their contracts got terminated at whim without consultation. What makes the Tendele mine case more sinister is that the contract workers come from families who gave up their land and fields for the mine and were promised permanent jobs. Mama Zembe's story above about the invisible care work she had to engage in after her husband got sick is instructive.

Increasingly HIV/AIDS has also been notably on the rise in mining communities. A 2018 study conducted in Somkhele - where Tendele mine operates – found that the HIV/AIDS rate in the area is on the rise. Somkhele and other mining communities have been conceived of as "corridors of HIV transmission" and their populations as "hyper-endemic". This study notes that in the 10 years it followed community members "the rate of new HIV was 70% higher than surrounding communities" (2018: 538). The authors argue that at the beginning of the study the rate of infection was 6.1 (2004-2008) then it went down to 5.6 between 2009-2012 and shot up to 16.2 between 2013 and 2014 a striking increase in the last few years. the rate of infection for men, the study found, was 2.0 per 100 person years while for women it was 4.1 per 100 person years with women around the age 22 being at the highest risk (7.6 cases per 100 person years) and 27 for males. They attribute these findings to the high levels of mobility in the population due to mining and reliance on migrant labour and the socio-economic status of young women in the community. Similarly, to other mining communities then, Somkhele is also characterised as a "hot spot" because of the high concentration of sex workers around

mines. It is not only sex work that is on the rise, but teenage pregnancy, child prostitution- as indicated by the Rustenburg Community Report.

Other impacts of mining on the health of community members demonstrate the intersections between health and environmental destruction. An interview with a traditional healer in Somkhele demonstrated these connections. Before resumption of mining activities forests had to be cleared to make way for the mine. This clearing of forests meant getting rid of indigenous plants and trees that take years to grow. These trees and plants, the traditional healer noted, were not only central in the ecosystem of the area but were critical in traditional medicine and connecting with ancestors. The absence of these herbs and trees then has not only affected his business, but the health of the community, both physically and spiritually. He argued that with the absence of some of the trees, roots and herbs people must rely more on expensive western medicines even for illnesses that were previously easy to heal using local herbs, roots, and trees.

Text box: A local traditional healer also confirmed the changes in water quality.

"I'm a traditional healer. The arrival of the mine has changed a lot of things for me. I no longer have access to the medicinal plants that I used to have access to. The mine destroyed most of the plants and trees to start operating. The few plants that remain, are very dirty from coal, I must clean them, and they don't have the same effect, plus we do not have clean water. This is affecting my own health and my practice... as my clients no longer get the service they need. The medicinal plants I can no longer access are Ngwebenkulu, Mncaka, Mhlambamanzi, Mqhume, Mnukelambili. Ngwebenkulu is the one that I need the most and it is scarce. I must now walk long distances to find them. Mhlambamanzi is available but it is dirty. Uqhume is also scarce now, same as mnukelambili. These medicinal plants help those people who are ill from ancestral spirits. They heal them…I cannot heal people if I don't have access to medicinal plants. We will all start getting sick without these plants… the community is no longer able to heal simple colds and flus because the herbs no longer grow in the area and when they do grow, and when they grow, they are of low quality. I am worried." (Interview with Baba Saka, 27 January 2021).

Photo 16: Flower with coal dust *Source: Asanda-Jonas Benya*

7. Resistance

The deep disgruntlement of workers and communities in mining communities has led to unrests. Resistance has taken many forms; from small acts of resistance, uncoordinated 'subaltern practices' to highly coordinated mass actions that undermine power. In the workplace we have seen an increase in everyday forms of resistance and strikes that have crippled the mining sector. They reached a boiling point in the 2012 – 2014 strike wave in the platinum sector. This culminated in the Marikana massacre and later the five months long strike. These workplace strikes have often been initiated and driven by those on the interstices of precarity, demanding a *living wage*. In mining workplaces, strikes are often characterised by their own local moral orders, which often include the use violence. Marikana is a case in point here where men who were striking bore the brunt of violence from the police, and also from other workers who used violence as a means of forging solidarity during strikes. While men are often at the forefront of workplace strikes, it is important to remember that it was women who sustained them through their support.

In communities too there are documented resistance actions. Some communities have been resisting mining, proposing alternatives. Other communities have been resisting the current model of mining that disadvantages communities. They have been calling for mining that benefits communities or mining that shares revenues fairly with affected communities. Different campaigns have accompanied these resistance efforts, from Xolobeni to Makhasaneni, Fuleni and Somkhele. At community protests, activists have been demanding that mining companies fulfil their SLP obligations, stop grabbing water and land, as it results in displacement, loss of livelihoods and loss of control over communal resources. The unrest in mining communities, unlike purely service delivery protests seen across the country, are

precipitated by the mines that operate in and around communities but share very little of the benefits with those who own and occupy the land, and who sell their labour power.

In Somkhele people have also led several resistance actions from worker led strikes to community led protest action. Some of these resistance actions have taken to the courts. While in the Marikana massacre the police were called and workers were shot and killed, in Somkhele, villagers said the mine relies on local hitman '*inkabi'* to target and 'discipline' strike leaders or activists in the community. In other interview we were told that "whenever there is a protest at the mine, the mine calls their hitman and contractors who benefit from the mine, such as truck owners. It tells them to come and *deal* with the people who are blocking the operations of the mine…They come and tell people that they are going to make another 'Marikana' at Tendele." The use of Marikana as a metaphor is very telling of the violence and willingness to go at extra lengths to ensure that production is not disturbed and that there are no work stoppages. There were a number of reports of civil and labour unrest reported in Somkhele leading to arrest of local activists, their mothers and sisters.

In South Africa, while workplace strikes have been led by men, community protests, including in mining communities, have mainly been led by women activists (eg Nonhle Mbuthuma, Davine Cloete and Fikile Ntshangase). It is not a coincidence that these struggles and mobilization efforts have been led by women thus making women "potential targets for harassment and attacks". As the report "We know our lives are in danger" demonstrates, women in mining communities are usually the first people to experience harms from mining activities. As such, they tend to be the ones who are at the forefront of struggles that defend the lands they depend on as a source of livelihoods and to sustain their families. Because they have the most to lose, they become the 'core of defiance'. How resistance plays out then, and the violence seen is gendered and reflects gendered grievances at work and in communities.

8. Conclusion

"The biggest change for me is that I am no longer able to farm and subsist. I no longer have crop fields. They were taken by the mine. That land was great for farming. Here I am not happy, the promised jobs are not here." (Interview with Mr Silas, 24 January 2022).

"They extract coal in our area, they just keep taking and giving us nothing. All our water is now used by the mine. They built their own roads; we can't use them. You see big signs written "private property". They built a bridge but when it rains the cars can't go through, it is bad. There is really nothing good that the mine brought here in our community" (Focus group discussion 1, 26 January 2022).

Photo 17: A bridge built by the mine
Source: Asanda-Jonas Benya

Photo 18: Pipes of the bridge built by the mine

This report has attempted to demonstrate what the gendered impact of mining is and how mining does not affect everyone uniformly, but its effects are gendered and racialized. This is often ignored by policy and legislation on mining. Indeed, mining has been central in shaping, in a gendered fashion, South Africa's social, economic, and political landscape. But that it has had a positive impact in the lives of people and has contributed to uplifting communities is highly contestable and refutable. The negative gendered externalities of mining are too glaring to be ignored. The health and environmental externalities which affect communities disproportionately with much of the burden often carried in gendered ways and, arguably, disproportionately by women must be considered and weighed to get a rounded picture of what mining truly means both for this generation and future generations. The impact; environmental, social, cultural needs urgent and honest attention of those in power.

Above we outline how the gendered impact of mining on communities and workers has been dire, enduring, harmful not only to the current and past generations, but also future generations. In a context of economic deprivation and land dispossession, the health, socio-economic and environmental impact is likely to deepen and will continue to be felt not only by workers, but by the 13 million people who directly depend on them. The struggles for and against mining

have torn families and communities apart. The 'development' promised by these mining projects has been enjoyed by a few elites or politically connected. People's rights to life, to safety, to food, to water, to housing, to culture, to a safe environment have all been undermined, though the extend of that differs from village to village. As such people demand just compensation for devastation, they have endured both at work and in mining communities. People need recourse, mines, and the state, in collusion with traditional authorities cannot go on without being held accountable for the crimes committed in these communities by mining capital.

The idea that lives, lands, water sources can be restored, "repurposed" and rehabilitated after mine closures for resumption of life by those who live near mines seems to be a fallacy and deceptive as there are no independent studies making such claims. Instead, literature overwhelmingly demonstrates that the mining sector does not just destroy while in operation, but even after closure due to poorly-regulated mine closures. Even after mining activities cease, unrehabilitated mines continues to cause harm to people, on natural resources, lives, livelihoods, identities, culture, affecting water, air and soil quality. The impact, as demonstrated above, is gendered, i.e. men and women experience the presence of a mine differently and they respond differently too, depending on social and cultural resources available, norms and expectations on them, their bodies, their time and material resources. Institutions and people in power need to be held accountable.

From cases studies, the long-term sustainability of communities around mines or labour sending areas seems to depend *primarily* on resistance efforts waged on the ground by workers and communities with support from likeminded activists and organisations. The 'benevolence' of mining companies and their public relations machinery, which spins and churns out reports with hyper-positive narratives about the impact of mining on economic growth will not prevent harm. Only the people, communities, and workers (with the solidarity support from many corners) will stop the destruction of lives and livelihoods. The resolve of a politically conscious critical mass, with necessary support, will restore what has been broken. We have seen in communities like Xolobeni and Makhasaneni where people have shown strong activism that they are able to push back. Solidarity and support, however, are critical. While the struggles should be led by the people directly affected, they need a show of solidarity from likeminded organisation and activists.

9. Recommendations

9.1 Capacity building for resistance

Post-apartheid mining deals that involve communities have been marred by conflict and violence on one hand and daily struggles to survive on another. Mining companies have taken advantage of the desperation and greed to circumvent laws put in place to protect people, the environment and natural resources. They have taken advantage of weak political engagement and consciousness about citizenship rights and entitlements in some of these communities. This necessitates the need to capacitate (in non-paternalistic ways) and co-build gender sensitive and strong activism that relies on data and informed analysis. Only communities that are politically engaged and conscious have been able to sustain struggles over time. Engage and build people's power making sure to include women and ensure an environment that is inclusive. Support local struggles led by people directly affected, especially women or gender sensitive struggles.

9.2 Deliberately organising women and mass-based progressive feminist political education

Organising at local level and ensuring that women are intimately involved in and leading the political work are effective routes to the realization of and protection of people's rights. Movements building must be driven from below. Only organized movements and coalitions can put pressure on states and mining companies.

For communities to make sense, for themselves, of the gendered impact of mining and thus design relevant campaigns, *feminist political/popular education* is critical. This popular education should aim to capacitate local activists, not only activist leaders. For popular education to make an impact, it needs to be over a period, with *reliable funding streams*.
It is at these feminist popular education platforms where campaigns can be developed from below, informed by research. This feminist popular education can be linked to broader political work already happening in communities. Learning through exchanges can also be facilitated and funded.

9.3 Intersectional social movement unionism

This is a distinct form of organising workers and communities, one that recognises that economic rights are intimately tied to human rights. Instead of compartmentalising struggles for justice, it links them ie links workplace issues to broader community issues. When social movement unionism is intersectional, that means it recognises that race, class, gender, sexuality, nationality, geographical location etc all mediate people's experiences.

The relevance of this model for the cases above is that, in most of them, workers organise separately from community members even though workers are also community members and thus inhabit both these identities and spaces and face problems that are connected. Resuscitating social movement unionism that links community, environmental, health and workplace struggles would necessitate deliberately building solidarity between workers and the broader community- thus work against capitalist logic- it would connect struggles consolidating people's power and efforts.

9.4 Psycho-social support

In Somkhele the community is traumatised by what displaced families have been subjected to. The exhumation of graves in front of them and seeing bones of their ancestors is a source of torment for people. Some believe that their ancestors are displeased with them and may even turn their backs on them and future generations because of how the entire exhumation process

was handled. There is a need, therefore, to support communities process the trauma and put in place psycho-social support structures that can help them long term. These could draw from or be in collaboration with indigenous support systems and should be led by local people. During interviews, participants often remarked that they appreciated the space to reflect on their experiences and be listened to. This was the case even after highly emotional interviews. Space for collective reflection, for support and coping with the day-to-day struggles seem critical. People also need to be fairly and fully compensated for all costs related to grave exhumation, including but not limited to all ritual costs associated to exhumation and re-burials.

9.5 Strengthen community research capacity to counter inaccurate narratives

Community members are best placed to collect data, continually, that speaks to the local context. This data would have to be disaggregated by gender so that communities are able to map the gendered impact. For instance:

- If water wells are contaminated, how does that affect men and women?
- If many people in communities are suffering from lung diseases, in what ways does that alter or affect care work women do?
- If mines are making claims that they fulfil their SLPs, research and social audits by communities needs to be able to provide locally grounded, reliable, and sophisticated data to counter inaccurate claims.
- Concrete evidence-based data that is collected continually or in line with Social and Labour Plans is insufficient and communities can be capacitated to collect this data in order to write their own alternative reports to shape public narrative about the impact of mining in their communities.

9.6 Health research on the "Somkhele Lung"

In Somkhele and other mining communities, especially coal mining communities, people's health is deeply compromised. From the elders to the youngest members of the community people are coughing, sneezing, have been diagnosed with one respiratory disease (including lung cancer) or the other. Systematic health data on the impact of coal mining on people's lungs needs to be collected. Longitudinal studies that compare the health of the lungs of people of Somkhele (and other coal mining communities) with other nearby non-mining communities is critical both for public health interventions for Somkhele and to support litigation or class action suits similar to the recent one by ex-gold miners.

Workplace data on injuries and fatalities is not always reliable, especially in the context of subcontracting where injuries are not always reported. Communities- working closely with families of mineworkers- are best placed to collate data on injuries and diseases that are linked to minework. This requires training of and support for community health monitors who can collate data to supplement the data reported by mines.

9.7 Justice for miners and women in mining communities: Just Compensation Campaign

People in Somkhele, and many other mining communities, are demanding justice. They want to be fairly compensated for the destruction they have experienced. They have been displaced and their lives uprooted with utter disregard for what matters most to them, their livelihoods, their ancestral homes, the graves, identities, culture & heritage and community. They need just compensation.

Workers are sick and dying because of mining activities and they have been told that they can no longer work anywhere, ever. These are young people with families who depend on them. They want to see justice.

Since the impact of mining is gendered, just compensation needs to consider the gendered nature of the impact and systematically work through the losses (including non-quantifiable losses) suffered and their future implications for these communities.

There is a need to develop and sustain local campaigns that can be connected to global campaigns demanding justice for miners and affected communities. Mining companies operate globally, the impact of mining is repatriated and spread across different parts of the global South. There is thus a need for communities across the global south to organise in ways that recognise the global character of capital and to formulate or strengthen campaigns that are grounded in local struggles but cross borders.

9.8 Litigation

There is abuse and disregard of local communities by mining companies and the state because of power imbalances. From interviews and focus group discussions in Somkhele people noted that the state and the mine only started paying attention to them and dialoguing with them when lawyers got involved and when some of the parties were served with court papers. Litigation needs to be supported alongside other political strategies as noted above.

Litigation has proven to be one of the effective ways communities can get justice and just compensation. For cases to be won, lawyers need compelling evidence to support the claims made by individuals and communities. We therefore need to collect evidence to strengthen legal support.

9.9 Support for local activists

People who speak against mining or who are demanding fair compensation from mining companies have been threatened, intimidated, victimised and some killed. There are organisations that support activists who speak up, but the support they render is not enough to keep activist out of harm's way. During our research in Somkhele we learnt of activists who have fled their homes and are now living on the streets, and some are in danger of being repatriated back to their communities (after being in hiding due to threats to their lives because of their mining activism) because supporting organisations no longer have funds.

It is important that the above recommendations not be read as gender neutral, but that programmes/projects think through the specifics of what incorporating a gender lens to each of them might mean and look like during operationalisation. It is this critical, therefore, to tease out the gender specificities in ways sensitive to each context and local priorities.

10. Research and policy gaps

A comparative participatory action research: The scope of this research was very small and duration short, a much thorough study of a few communities that mine different minerals and metals would go a long way in surfacing the different ways in which mining affects people's lives and livelihoods. Such a study would benefit if using participatory action research and involves locals from conceptualisation until write up.

Quantify the loss: People in Somkhele, as in other mining communities, argue that they have lost far more than the compensation received due to mining activities. Research that quantifies loss – it's full extent and life time impact using a gender lens- is most needed as people continue to make demands for justice. If mining companies knew how much it *really* costs to compensate people fairly and displace communities, taking into consideration different family configurations, homestead sizes, communal resources, ancestral connections to the land etc, it might deter companies.

Gendered impact of different regimes of mining capital: A research that looks at the gendered disparities tied to the different regimes of mining capital e.g., gold and platinum and how they have different impact at community level and for workers.

Legal provisions around compensation: While there are legal provisions around compensation, these do not take into consideration the full scope of what fair compensation in the local context means.

Free, Prior and Informed Consent: South African mining legal framework does not explicitly and unambiguously grant "mine communities" this right. Recent amendments do not go far enough in addressing this limitation.

Gender blind policies: Almost all relevant mining pieces of legislation in South Africa are gender blind. They treat "affected" people and communities as if homogenous. There is a need to push for not just gender sensitive but radical gender just laws that valorise equity and not just equality.

References

Alec, B.J., 2020. *Mine closure narratives in the Free State Goldfields, South Africa* (Doctoral dissertation, University of the Free State). http://scholar.ufs.ac.za:8080/xmlui/handle/11660/11032?show=full.

Alexander, P., 2007. Women and coal mining in India and South Africa, c1900-1940. African Studies, 66(2-3), pp.201-222. https://www.tandfonline.com/doi/abs/10.1080/00020180701482701.

AllAfrica, 2012. South Africa: Mining Is Destructing the Country - Bench Marks Foundation. https://allafrica.com/stories/201206110868.html.

Balch,O., 2015. Radioactive city: how Johannesburg's townships are paying for its mining past. The Guardian. https://www.theguardian.com/cities/2015/jul/06/radioactive-city-how-johannesburgs-townships-are-paying-for-its-mining-past.

BenchMarks, 2022. South Africa – The Most Unequal Country in the world?. https://www.bench-marks.org.za/south-africa-the-most-unequal-country-in-the-world/.

BenchMarks,2017. AcitonVoices work in progress. https://www.bench-marks.org.za/wp-content/uploads/2021/02/action_voices_october_2017.pdf.

Benya, A., 2008. The Informal in the Formal/ Subcontracting in Platinum Mines in North West. Johannesburg/ Sociology of Work Unit, University of the Witwatersrand.

Benya, A., 2013. Gendered labour/ A challenge to labour as a democratizing force. Rethinking Development and Inequality, 2(Special Issue), pp.47-62.

Benya, A., 2015. The invisible hands: women in Marikana. *Review of African Political Economy*, *42*(146), pp.545-560. https://www.tandfonline.com/doi/full/10.1080/03056244.2015.1087394?casa_token=kHZtsWPVOooAAAAA%3A7LlUb_2kQ-34kVkgBQ6vw2rrpXpuoTEe76DZnGPic_cUTgsIdfTJIVAdzIXyudZWaRDxxrHwLSrq6Ac.

Benya, A., 2015. Women, subcontracted workers and precarity in South African platinum mines: A gender analysis. *Labour, Capital and Society/Travail, capital et société*, *48*(1&2), pp.68-91. https://www.jstor.org/stable/26476419?seq=1

Benya, A., 2016. *Women in mining: Occupational culture and gendered identities in the making* (Doctoral dissertation, University of the Witwatersrand, Faculty of Humanities, School of Social Science). https://wiredspace.wits.ac.za/handle/10539/22425.

Benya, A., 2017. Going underground in South African platinum mines to explore women miners' experiences. *Gender & Development*, *25*(3), pp.509-522. https://www.tandfonline.com/doi/abs/10.1080/13552074.2017.1379775.

Benya, A., 2017. Excluded While Included: Women Mineworkers in South Africa's Platinum Mines. In Global Currents in Gender and Feminisms. Emerald Publishing Limited.

Bezuidenhout, A. and Buhlungu, S., 2011. From compounded to fragmented labour/ Mineworkers and the demise of compounds in South Africa. Antipode, 43(2), pp.237-263. https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1467-8330.2010.00758.x.

Bezuidenhout, M., 2020. The Right to Say No is about balancing power. Alternative Information & Development Centre. https://aidc.org.za/the-right-to-say-no-is-about-balancing-power/.

Bezuidenhout, Andries (2008), 'New Patterns of Exclusion in the South African Mining Sector.' In Kristina Bentley and Adam Habib (eds.). Racial Redress and Citizenship in South Africa. Pretoria: HSRC Press.

Bezuidenhout, Andries & Buhlungu Sakhela (2015), Enclave Rustenburg: platinum mining and the post-apartheid social order, Review of African Political Economy, 42(146), 526-544.

Bobbins, K., 2015. Acid Mine Drainage and its Governance in the Gauteng City-Region. https://cdn.gcro.ac.za/media/documents/amd_occasional_paper_final_web.pdf.

Bolt, M. and Rajak, D., 2016. Introduction: Labour, insecurity and violence in South Africa. *Journal of Southern African Studies*, *42*(5), pp.797-813.

Breckenridge, K., 1998. The allure of violence: Men, race and masculinity on the South African goldmines, 1900–1950. Journal of Southern African Studies, 24(4), pp.669-693.

Brown, G., Dowling, E., Harvie, D. and Milburn, K., 2013. Careless talk: Social reproduction and fault lines of the crisis in the United Kingdom. *Social Justice*, *39*(1 (127), pp.78-98. https://www.jstor.org/stable/41940969?casa_token=I_HkK45NUO4AAAAA%3AzfiZNMYZn2ND9VICl24XfuOsUTrcGtQiu2D70VOEYjLhhU8Do36yriyZqXXDCoa9epNvYsrpuP7ZXiDAqHX6Lh5rMH0waZ67Grzg9m6jPjUsAJ2PQgP7zQ&seq=1.

Bua Mining Communities & Bench Marks Foundation., 2017. Never 'Mined' Health Effects. A Community Survey of the State of Clinics near Mining Communities in Rustenburg Local Municipalities. http://communitymonitors.net/wp-content/uploads/2017/09/Never-Mined-Health-Effects-Rustenburg2017-3.pdf.

Capps, Gavin and Mnwana, Sonwabile (2015), Claims from below: platinum and the politics of land in the Bakgatla-ba-Kgafela traditional authority area, Review of African Political Economy, 42(146), 606-624.

Carnie,T,.2022. Acid water trail of death reignites concern over South Africa's abandoned coal and gold mines. Daily Maverick. https://www.dailymaverick.co.za/article/2022-03-17-acid-water-trail-of-death-reignites-concern-over-south-africas-abandoned-coal-and-gold-mines/.
Centre For Environmental Rights, 2019. "We Know Our Lives Are in Danger": Environment of Fear in South Africa's Mining-Affected Communities. https://cer.org.za/reports/we-know-our-lives-are-in-danger.

Centre For Environmental Rights, 2019. We Know Our Lives Are in Danger": Environment of Fear in South Africa's Mining-Affected Communities. https://cer.org.za/reports/we-know-our-lives-are-in-danger.

Centre For Environmental Rights, 2020. Case against Tendele Coal in Supreme Court of Appeal tomorrow. https://cer.org.za/news/case-against-tendele-coal-in-the-supreme-court-of-appeal-tomorrow.

Centre For Environmental Rights, 2020.The killing of Somkhele environmental activist Fikile Ntshangase: A joint statement. https://cer.org.za/news/the-killing-of-somkhele-environmental-activist-fikile-ntshangase-a-joint-statement.

Centre of Environmental Right., 2021. Community activists protesting devastating impacts of coal mine shot at and arrested. https://cer.org.za/news/community-activists-protesting-devastating-impacts-of-coal-mine-shot-at-and-arrested.

Chaskalson, R., 2016. The Road to Marikana: Transformations in South Africa's Platinum Industry, 1994–2012. *Journal of Southern African Studies*, *42*(5), pp.857-873. https://www.tandfonline.com/doi/full/10.1080/03057070.2016.1211807?casa_token=Vd5E1zKi1BMAAAAA%3AnVyrG9OkJNxvEH_I2K6k48-6yC1dSd2GpFwmhdTE9ursH94z4kSx36ftQtm83rZAce54WuGVf1hV6iI.

CIVICUS. 2016.Death is something we were expecting: Interview with Amadiba Crisis Committee. https://www.civicus.org/index.php/media-resources/news/interviews/900-death-is-something-we-were-expecting-interview-with-amadiba-crisis-committee.

Crush, J., Ulicki, T., Tseane, T. and Van Veuren, E.J., 2001. Undermining labour: the rise of sub-contracting in South African gold mines. *Journal of Southern African Studies*, *27*(1), pp.5-31. https://www.jstor.org/stable/823288?seq=1.

Doctors Without Borders, (n.d).UNTREATED VIOLENCE:The Need for Patient-Centred Care for Survivors of Sexual Violence in the Platinum Mining Belt.

https://www.msf.org.za/sites/default/files/publications/untreated_violence.pdf.
Doctors without borders, 2019,. Driving for Change - a frontline response to sexual violence in Rustenburg. https://www.msf.org.za/news-and-resources/videos-and-photos/driving-change-frontline-response-sexual-violence-rustenburg.

Ehrlich, R.I., Churchyard, G.J., Pemba, L., Dekker, K., Vermeis, M., White, N.W., Thompson, M.L. and Myers, J.E., 2006. Tuberculosis and silica exposure in South African gold miners. *Occupational and environmental medicine*, *63*(3), pp.187-192. https://pubmed.ncbi.nlm.nih.gov/16497860/.

Ehrlich, R.I., Myers, J.E., te Water Naude, J.M., Thompson, M.L. and Churchyard, G.J., 2011. Lung function loss in relation to silica dust exposure in South African gold miners. *Occupational and environmental medicine*, *68*(2), pp.96-101. https://pubmed.ncbi.nlm.nih.gov/20884796/.

Ellis, E., 2020. Death threats as Amadiba Crisis Committee fights for control over land. Daily Maverick. https://www.dailymaverick.co.za/article/2020-11-19-death-threats-as-amadiba-crisis-committee-fights-for-control-over-land/.

file:///Fletcher and Ely 2003/3%3B Acker 1990%3B Connell 1987%3B 2002 (page 5)

Free, Prior And Informed Consent In The Extractive Industries In Southern Africa, (n.d). https://africanlii.org/sites/default/files/2018%20Free%20Prior%20and%20Informed%20Consent%20OXFAM.pdf.

Global Enviromental Trust Mfolozi Community Enviromental et. al & Tendele Coal Mining. Et.al, 2021. Global Environmental Trust and Others v Tendele Coal Mining (Pty) Ltd and Others. http://www.saflii.org/za/cases/ZASCA/2021/13.html.

Global Witness, 2020,. "I cannot sell out my people. And if need be, I will die for my people.". https://www.globalwitness.org/en/blog/i-cannot-sell-out-my-people-and-if-need-be-i-will-die-for-my-people/.

GroundWork, 2020. The Water Crisis in a Time of the COVID-19 Crisis - Women of Somkhele and civil society groups call on government to uphold promises and to provide water, in the time of the COVID-19 threat. https://www.groundwork.org.za/archives/2020/news20200408-The_Water_Crisis_in_Somkhele_in_a_Time_of_the_COVID-19_Crisis.php.

Hamann, R. and Bertels, S., 2018. The institutional work of exploitation/ Employers' work to create and perpetuate inequality. Journal of Management Studies, 55(3), pp.394-423. https://onlinelibrary.wiley.com/doi/abs/10.1111/joms.12325.

Hargreaves, S., 2016. Women's unseen contribution to the extractive industries: Their unpaid labour. https://womin.africa/wp-content/uploads/2020/09/paper-four.pdf.

Harvest Season, call to action, 2021. SA Mine. https://www.pwc.co.za/en/assets/pdf/sa-mine-2021.pdf.

Hyman,A.,2020. Mining communities join protest at Cape Town coal summit. TimesLive. https://www.timeslive.co.za/news/south-africa/2020-01-30-watch-mining-communities-join-protest-at-cape-town-coal-summit/.

IOL, 2018. **Gold Fields sweetens retrenchment packages.** https://www.iol.co.za/business-report/companies/gold-fields-sweetens-retrenchment-packages-18310265.

IOL, 2019., Community protests over mining are on the rise. https://www.iol.co.za/business-report/companies/watch-community-protests-over-mining-are-on-the-rise-33946780.

Irwig, L.M. and Rocks, P., 1978. Lung function and respiratory symptoms in silicotic and nonsilicotic gold miners. *American Review of Respiratory Disease*, *117*(3), pp.429-435. https://pubmed.ncbi.nlm.nih.gov/629477/.

James, N., 2018. Perceptions mines are not doing enough for nearby communities fuelling protests. https://www.engineeringnews.co.za/print-version/perceptions-mines-are-not-doing-enough-for-nearby-communities-fuelling-protests-2018-07-20.

Karombo,T,2020,.South Africa has the worlds highest number of environmentally dangerous tailing dams. QuartzAfrica. https://qz.com/africa/1786297/south-africa-has-most-environmentally-dangerous-tailing-dams/.

Kenny, B. & Bezuidenhout, A., 1999. Contracting, complexity and control: An overview of the changing nature of subcontracting in the South African mining industry. *Journal of the Southern African Institute of Mining and Metallurgy*, *99*(4), pp.185-191. https://www.saimm.co.za/Journal/v099n04p185.pdf.

Khalane,S.,2019. Retrenched South Deep mineworkers face eviction. New Frame. https://www.newframe.com/retrenched-south-deep-mineworkers-face-eviction/.

Kockott, F & Hattingh,M,. 2020. Violence on border of iMfolozi-Hluhluwe Game Park linked to fears of mass retrenchments.DailyMaverick.https://www.dailymaverick.co.za/article/2020-10-23-violence-on-border-of-imfolozi-hluhluwe-game-park-linked-to-fears-of-mass-retrenchments/.

Liu, T. and Liu, S., 2020. The impacts of coal dust on miners' health: A review. *Environmental Research*, *190*, p.109849. https://www.sciencedirect.com/science/article/abs/pii/S0013935120307441?casa_token=LeLmbnYD6Z4AAAAA:z0-S5gcI6F0CpgB4a76CZdKBVok-hzAvpSBvyJEhE_9Dgx2au-Iw1BbwfbKxq07Tvp-U50r_0tKg.%20%20%20%20%20%20%20%20%20%20file:///Liu,%20T.%20and%20Liu,%20S.,%202020.%20The%20impacts%20of%20coal%20dust%20on%20miners'%20health/%20A%20review.%20Environmental%20Research,%20190,%20p.109849.

Love, J., 2015. Report of the SAHRC Investigative Hearing-Issues and Challenges in relation to Unregulated Artisanal Underground and Surface Mining Activities in South Africa. *Johannesburg: South African Human Rights Commission*. https://www.sahrc.org.za/home/21/files/Unregulated%20Artisanal%20Underground%20and%20Surface%20Mining%20Activities%20electronic%20version.pdf.

Mahlangu, I., 2022. Residents blame mine blasting for damaged houses.SowetenLive. https://www.sowetanlive.co.za/news/south-africa/2022-02-08-residents-blame-mine-blasting-for-damaged-houses/.

Mail & Guardian, 2016,. Mining discontent: How women miners are raped, and become sex skivvies to get ahead. https://mg.co.za/article/2016-10-03-00-mining-discontent-how-women-miners-are-raped-and-become-sex-skivvies-to-get-ahead/.

Marikana Massacre 16 August 2012, South African History Online. https://www.sahistory.org.za/article/marikana-massacre-16-august-2012

McCulloch, J., 2003. Women mining asbestos in South Africa, 1893-1980. *Journal of Southern African Studies*, *29*(2), pp.413-432. DOI: 10.1080/03057070306201 https://www.tandfonline.com/doi/abs/10.1080/03057070306201?casa_token=ZT9TPeqy0g0AAAAA:ergx5vAFLWbgBuSYTCdoRywRAWYWpU44y570k2Hfbsa1ev8WqJdAaOCo7nHYx0ps6g0kJKFXByM2LPc.

Media statement by the Bench Marks Foundation,. 2017. Acid mine drainage real threat to mine-impacted communities. https://www.bench-marks.org.za/wp-content/uploads/2021/02/acid_mine_drainage_real_threat_to_mine-impacted_communities.pdf.

Mine, (n.d),. Sexual Misconduct in the Industry. https://mine.nridigital.com/mine_jun18/metoomining_sexual_misconduct_in_the_industry.

Mining South Africa, 2018., Whose Benefit and whose Burden? https://www.osf.org.za/wp-content/uploads/2019/02/sar-5.3_online.pdf,

Mnwana, S., Mtero, F. and Hay, M., 2016. Dispossessing the dispossessed/ Mining and rural struggles in Mokopane. Limpopo. Working Paper 7, Society, Work and Development Institute (SWOP), University of Witwatersrand.

Model Act/Regulation on Gender Assessments In Energy Projects, (n.d). http://www.ecowrex.org/system/files/model_act_regulation_on_gender_assessments_in_energy_projects.pdf.

Moodie, T.D., 2005. Maximum average violence/ underground assaults on the South African gold mines, 1913–1965. Journal of Southern African Studies, 31(3), pp.547-567. https://www.tandfonline.com/doi/abs/10.1080/0305707052000345090.

Munnik, V., 2016. How coal mining in Mpumalanga threatens food security https://www.grainsa.co.za/how-coal-mining-in-mpumalanga-threatens-food-security

Ndibongo, B., 2015. *Women of Marikana Survival and Struggles*. University of Johannesburg (South Africa). https://www.proquest.com/openview/f11419a1a7b194658ef9bd715daa9169/1?pq-origsite=gscholar&cbl=2026366&diss=y.

Nelson, G., 2013. Occupational respiratory diseases in the South African mining industry. *Global health action*, *6*(1), p.19520. https://pubmed.ncbi.nlm.nih.gov/23364097/.

Nelson,G &Ndlovu N., 2022. Occupational Health Southern Africa. Vol.28 No 2. http://www.occhealth.co.za/?/download/articles_179_1000/OccHealthDoc_439_1406_Kruger_skin_disease.pdf.

Ochieng, G.M., Seanego, E.S. and Nkwonta, O.I., 2010. Impacts of mining on water resources in South Africa: A review. *Scientific Research and Essays*, *5*(22), pp.3351-3357. https://academicjournals.org/journal/SRE/article-abstract/E1F28F718891.

Pejan,R, Rall, K, Mokgalaka, R, Kapa , M. Coleman, D, Mavhinga, D, Orellana,M & Ramachandra, K, 2019. South Africa: Activists in Mining Areas Harassed. https://earthjustice.org/news/press/2019/south-africa-activists-in-mining-areas-harassed.

Pereira, C., 2021. Extractivism, Resistance, Alternatives. *Feminist Africa*, *2*(1), pp.1-13. https://journals.ug.edu.gh/index.php/fa/issue/view/48/43.

Petmin., (n.d).Somkhele Fact Sheet. https://www.petmin.co.za/pdf/about-somkhele/somkhele-fact-sheet.pdf.

Policy Gap 12, (n.d), Soweto Report “waiting to inhale” A survey of household health in four mine affected communities. https://media.business-humanrights.org/media/documents/files/documents/Benchmarks_policy_gap_12.pdf.

Radebe, S., 2016. Faces of Assassination. Global Initiative. https://assassination.globalinitiative.net/face/sikhosiphi-radebe/.

Rafapa, M., 2020. Communities picket against mining bills. https://www.groundup.org.za/article/communities-picket-against-mining-bills/.

Ross, M.H. and Murray, J., 2004. Occupational respiratory disease in mining. *Occupational medicine*, *54*(5), pp.304-310. https://pubmed.ncbi.nlm.nih.gov/15289586/.
Rustenburg Community Report. 2011. https://www.bench-marks.org.za/wp-content/uploads/2021/02/rustenburg_community_report_2011.pdf.

Schneider,V., 2021. Legal challenge to South Africa mine expansion looks to set new landmark. Mongabay. https://news.mongabay.com/2021/11/legal-challenge-to-south-africa-mine-expansion-looks-to-set-new-landmark/.

Schwarz,B & Mokgalaka,R., 2019. Interview: The Dangers of Opposing Mining in South Africa. https://www.hrw.org/news/2019/04/16/interview-dangers-opposing-mining-south-africa.

Seccombe,A., 2019. Sibanye is now the proud owner of Lonmin. BusinessDay. https://www.businesslive.co.za/bd/companies/mining/2019-06-10-sibanye-is-now-the-proud-owner-of-lonmin/.

See the comprehensive study done by WoMin looking at women in mining communities (page 5).

Skosana, D., 2022. Grave matters/ dispossession and the desecration of ancestral graves by mining corporations in South Africa. Journal of Contemporary African Studies, 40(1), pp.47-62. https://www.tandfonline.com/doi/abs/10.1080/02589001.2021.1926937.

Skosana,D.,2019. Mining activities continue to dispossess black families. https://www.wits.ac.za/news/latest-news/opinion/2019/2019-11/mining-activities-continue-to-dispossess-black-families.html.

Solidarity Center, 2021,.WHAT HAPPENS UNDERGROUND STAYS UNDERGROUND: A Study of Experiences of Gender-Based Violence and Sexual Harassment of Women Workers in the South African Mining Industry. https://www.solidaritycenter.org/wp-content/uploads/2021/04/South-Africa.Publication.What-Happens-Underground-Stays-Underground.04.2021.pdf.

South African Human Rights Commission, (n.d). Acid Mine Drainage and Human Rights. https://www.sahrc.org.za/home/21/files/AMD%20Booklet.pdf.

Stewart, P., 2015. 'Wages are but an expression of time'/ The misapprehension of labour time in the historiography of the South African gold mines since 1886. South African Review of Sociology, 46(3), pp.64-81.
https://www.bench-marks.org.za/wp-content/uploads/2021/02/policy_gap_13.pdf

Stewart, P., Bezuidenhout, A. and Bischoff, C., 2020. Safety and health before and after Marikana: subcontracting, illegal mining and trade union rivalry in the South African mining industry. *Review of African Political Economy*, *47*(163), pp.27-44. https://www.tandfonline.com/doi/full/10.1080/03056244.2019.1679103?casa_token=IjA-kfF-HeMAAAAA%3AUVdP6PD3nu1A2xbKRFl4hu5Ozejktn_4JX6-RsKmAPRozG3gTt866B5zvqEfqOF_fRSTQYlJTeULgxM.

Tanser, F., Bärnighausen, T., Dobra, A. and Sartorius, B., 2018. Identifying 'corridors of HIV transmission'in a severely affected rural South African population: a case for a shift toward targeted prevention strategies. *International journal of epidemiology*, *47*(2), pp.537-549. https://academic.oup.com/ije/article/47/2/537/4781374?login=true.

Tendele Coal Mining, 2019, Motivational Report. https://gcs-sa.biz/wp-content/uploads/2019/03/Appendix-31-1.pdf.

The Bench Marks (n.d)., Coping with Unsustainability (2) Critical analysis of Amplats Sustainable Development Reporting (SDR) from 2003 to 2015. https://www.bench-marks.org.za/wp content/uploads/2021/02/policy_gap_13.pdf.

The Centre for Applied Legal Studies, 2016,. The Social and Labour Plan Series. https://www.wits.ac.za/media/wits-university/faculties-and-schools/commerce-law-and-management/research-entities/cals/documents/programmes/environment/resources/Social%20and%20Labour%20Plans%20First%20Report%20Trends%20and%20Analysis%2030%20March%202016.pdf.

The Conversation, 2015,. Marikana tragedy must be understood against the backdrop of structural violence in South Africa. https://theconversation.com/marikana-tragedy-must-be-understood-against-the-backdrop-of-structural-violence-in-south-africa-43868.

The South African Human Rights Comission, 2018., Gwede Mantashe hits KZN to quell anti-mining sentiment. https://www.sahrc.org.za/index.php/sahrc-media/news/item/1568-gwede-mantashe-hits-kzn-to-quell-anti-mining-sentiment.

Van Wyk, D & Molebatsi, C,. 2017. Soweto Report: "Waiting to Inhale" A survey of household health in four mine-affected communities. https://www.researchgate.net/publication/320225273_Soweto_Report_Waiting_to_Inhale_A_survey_of_household_health_in_four_mine-affected_communities.

Vandome,C &Khama,S .,2021.Violence adds to uncertainty for South African Mining. Chatham House. https://www.chathamhouse.org/2021/08/violence-adds-uncertainty-south-africas-mining.

Washinyira,T., 2016. Wild Coast Amadiba mining opponent 'assassinated'. Mail & Guardian. https://mg.co.za/article/2016-03-23-wild-coast-amadiba-mining-opponent-assassinated-1/.

Women, Gender and extractivism in Africa, 2020. Women's Unseen Contribution To The Extractives Industries Their Unpaid Labour. https://womin.africa/wp-content/uploads/2020/09/paper-four.pdf.

Women, Gender and extractivism in Africa, 2020., A WoMin Perspective on international and regional policy and human rights frameworks. https://womin.africa/wp-content/uploads/2020/09/paper-one-1.pdf.

Women, Gender and extractivism in Africa, 2020.,Background Note And Exploration of Key Concepts. https://womin.africa/wp-content/uploads/2020/09/background-note.pdf.

WoMin, 2020., Land And Food Sovereignty undermined: Impacts on Peasant Women. https://womin.africa/wp-content/uploads/2020/09/paper-three.pdf.

World Bank, 2019. *Digging Beneath the Surface: An Exploration of the Net Benefits of Mining in Southern Africa*. World Bank. https://openknowledge.worldbank.org/bitstream/handle/10986/32107/Digging-Beneath-the-Surface-An-Exploration-of-the-Net-Benefits-of-Mining-in-Southern-Africa.pdf?sequence=1&isAllowed=y.

Youens, K., 2021. A Community Torn Apart by Coal Mining Taught Me Environmental Rights Are Human Rights. Global Citizen. https://www.globalcitizen.org/en/content/coal-mine-south-africa-environmental-justice/.

Zamchiya, P., 2019. Mining, capital and dispossession in Limpopo, South Africa. http://repository.uwc.ac.za/xmlui/handle/10566/4651.

ZuluLand Observer. (n.d). Tendele Coal Mining. https://zululandobserver.co.za/tendele-coal-mining/.

"We Know Our Lives are in Danger" Environment of Fear in South Africa's Mining-Affected Communities.2019. https://www.hrw.org/sites/default/files/report_pdf/southafrica0419_web.pdf. Human Rights Watch, GroundWork, Earth Justice& Centre for Environmental Rights.