

The impact of illegal mining in perpetuating high levels of crime in Gauteng

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ABSTRACT: *The second half of the nineteenth century saw the development of large scale mining industrial operations in South Africa (Mkhize, 2018). This industry grew remarkably to be the integral part of South Africa's economy in the twentieth century (Mkhize, 2018; Sibanye, 2023). For instance, the mining industry contributed more than 20% of South Africa's Gross Domestic Product (GDP) in the 1970s (Minerals Council, 2023). Overtime, the large scale mining industries saw a decline in production with mining contributing 6% of the GDP in 2023 (Minerals Council, 2023). The decline of large scale industrial mining in the country gave rise to the emergency of artisanal mining (Minerals Council, 2023). This article examines the impact of illegal artisanal mining on the high crime levels in South Africa particularly in Gauteng. Using a semi-systematic literature review, the researchers selected 31 empirical research sources to analyse the factors that necessitate the emergence of violent crimes within illegal artisanal mining operations in Gauteng. Finally, this article concluded that the legislative gaps in regulating artisanal mining activities impact immensely on the development of this industry. This further provides a space for artisanal mining to be infiltrated by organised crime elements (Sibanye, 2023).*

KEYWORDS: *Illegal mining, Artisanal mining, Crime, Abandoned mines, Zama-Zamas*

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I. INTRODUCTION

The decline of industrialised mining activities in South Africa contributed to multiple job losses that left many skilled miners unemployed in the early 90s (Mkhize, 2018). This was mainly influenced by a major decline in profitable mining operations (Sibanye, 2023; Mkhize, 2018). It further propelled the development of small scale artisanal mining activities known as Zama-Zamas (Sibanye, 2023; Mkhize, 2018). "Worth noting is the fact that illegal mining permeates various aspects of society such as socio-economic conditions, political factors and policing matters among others" (Phala, Mistry and Ramolobi, 2017).

The literature notes that, post the 1994 dispensation, there was a belief that artisanal mining was regarded as a strategy to eradicate poverty, unemployment and inequality within marginalised black communities in South Africa (Mkhize, 2018). Nevertheless, it is worth emphasizing that to this end, limited efforts have been made to achieve the aforementioned envisaged goal (Mkhize, 2018). This is primarily because South Africa has not yet fully enacted the necessary legislation to formalize the establishment of artisanal small-scale mining within the country (Mkhize, 2018). According to Bester (2023) government's efforts of formalising artisanal mining only in 2022 commenced with the process of developing a regulatory framework to formalise the establishment of artisanal mining. This was achieved through the publication of the draft artisanal and small scale mining policy for public comments in March 2022 (Bester, 2023).

The prolong delays in promulgation of a legislative framework to fully regulate artisanal and small scale mining activities provided an opportunity for artisanal mining to be infiltrated by elements of organised crime (Sibanye, 2023). Moreover, it is important to realise that illegal artisanal mining activities within the South African context are characterised by heavily armed individuals that regard themselves as gangs that terrorise mining communities in an attempt to steal gold bearing materials (Sibanye, 2023). According to Sibanye (2023) the negative effect of illegal mining activities on South Africa's mining industry has contributed to the multiple social, environmental and economic challenges which adversely impact the country's development. For instance, literature highlights that illegal mining activities contravene a number of pieces of legislation and property rights which in turn hinders South Africa's economic growth, it also discourages international investments (Minerals Council, 2023; Sibanye, 2023).

Additionally, various scholarly works propound that the impact of illegal mining activities, on environmental degradation range from the destruction of public infrastructure such as damaging underground water pipes to the creation of hazardous sinkholes (Sibanye, 2023). Similarly Strydom (2016) postulates that illegal artisanal mining activities undermine efforts that are aimed at achieving the objectives of the Mineral and Petroleum Resources Development Act (Act 28 of 2002), (Shall be referred to as PDA) which seeks to regulate the precious metal trade in South Africa. She further posits that illegal artisanal mining enables illicit trade of precious metals which in turn results in an estimated 7 billion Rand annual loss to the country's Gross Domestic Product (GDP) (Strydom, 2016)

This article explores the effect of illegal artisanal mining activities on escalating crime levels in South Africa. The intention in this regard is characterised by a need to examine factors that impact the rise of criminal elements within illegal artisanal mining operations particularly in Gauteng. The article was developed drawing from the Gauteng Department of Community Safety's 2016/17 study that explored the socio-economic, intergovernmental and policing implications of illegal mining in Gauteng province with an intention to assess the aetiology of violent crime elements within the community adjacent to the abandoned mines. This paper therefore explores the underlying factors that perpetuate the violence and gang activities that tend to be prevalent within illegal artisanal mining communities. The ultimate goal is to designate the impact of the lack of a legislative framework that establishes formal artisanal mining in South Africa.

II. BACKGROUND

In order to fully comprehend the developments on illegal artisanal mining in Gauteng, it remains prudent to explore the history of industrial mining in South Africa. Davenport (2013) traces the establishment of industrialised large scale mining in the last half of the 19th century. The large scale industrial mining operations in South Africa grew throughout the 20th century and became an integral part of South Africa's economy (Davenport, 2013; Sibanye, 2023). At its peak in the 1970s the mining sector contributed more than 20% to the country's GDP (Ngobese, 2015). For instance, in the year 2013 the President of South Africa acknowledged that mining is the backbone of the economy (Ngobese, 2015). It is also worth noting that, the mining sector in South Africa experienced a systematic downward shift more especially in the early 90s due to the decrease in local gold production from 605 tonnes to 133 tonnes (M-Resource, 2022). Therefore, the decline in gold production after 1994 was influenced by a number of factors that include among others:

- Change in the legislative frameworks,
- Research and development organizations recommendations which advocated for closure of certain mines that did not meet mining regulation standards, and
- Depletion of minerals underground (M-Resource, 2022).

Moreover, the closure of mines after 1994 resulted in a total of 273 152 job losses in South Africa, whereby thousands of skilled mine workers were left unemployed hence the rise in illegal artisanal mining activities across mining towns characterised by abandoned mine shafts (M-Resource, 2022).

As highlighted in the introductory section of this paper that the primary objective of pursuing the present study is to assess the contribution of illegal artisanal mining activities to the escalating levels of violent crime particularly in Gauteng. In an effort to achieve this goal, the succeeding section of this article succinctly highlights the key elements of the theoretical framework that is employed in sketching the thesis of this paper.

III. Theoretical Framework

The study of crime and deviance has long been a central focus within sociology, recognized as one of its most theoretically rich and dynamic areas (Sampson, 2000). The complexities of criminal behaviour and deviant acts have consistently attracted scholarly attention, not only from sociologists but also from experts across a range of disciplines (Sampson, 2000). Heidensohn (1989) highlights that physicians, psychiatrists, psychologists and more recently, economists have all contributed to the understanding of crime by applying the concepts and methodologies specific to their fields.

The present paper adopts both the broken window and routine activity theories in establishing the foundation of its conceptual framework. Here the intent is to study factors that necessitate the growth of violent crime incidents within illegal artisanal mining operations in South Africa's abandoned mines.

3.1 Broken Window Theory

The broken windows theory postulates the existence of a continuum of disorder, where small, seemingly insignificant instances of neighbourhood disorder if left unaddressed, escalate into larger, more serious problems (Kelling & Coles, 1996, Skogan, 1990, Wilson & Kelling, 1982). This progression begins with minor signs of neglect, such as broken windows or graffiti, which if tolerated, proliferates and contributes to a

broader perception of disorder. According to Spiteri (2024), this escalation fosters an increased fear of crime among residents, prompting them to withdraw from their community.

The withdrawal of communities weakens the invaluable informal social controls that typically serve as deterrents to criminal behaviour, thereby creating an environment where criminals feel emboldened to initiate or escalate their activities (Spiteri, 2024). Kelling (1996) highlights the strong link between disorder and the fear of crime, emphasizing that unaddressed disorder undermines community controls. The broken windows theory suggests that maintaining order in neighbourhoods can mitigate crime more effectively than tackling entrenched social issues like poverty and lack of education (Kelling, 1996). This is because addressing visible signs of disorder such as repairing broken windows or cleaning up graffiti sends a message of vigilance and informal social control (Kelling, 1996).

Kelling and Coles (1996) propose a community-oriented approach to addressing disorder, advocating for collaboration between police, citizens, and community groups to collectively combat minor crimes and social incivilities. This approach contrasts with zero-tolerance policies, which focus narrowly on arresting offenders for minor infractions without considering broader societal implications (Kelling and Coles 1996). By respecting offenders' civil liberties and fostering cooperative efforts, communities can effectively restore order while minimizing unintended consequences (Kelling and Coles 1996).

Furthermore, Kelling and Wilson (1982) stress the importance of proactive policing in preventing and addressing minor crimes, such as street muggings to prevent the escalation of disorder. They argue that police efforts to maintain police visibility in communities can reinforce informal social controls, fostering a sense of security and communal pride among residents (Kelling and Wilson 1982). The theory underscores the need for a holistic approach to crime prevention, where minor signs of the disorder are promptly addressed to prevent the decline of community controls and the escalation of criminal behaviour (Kelling and Wilson 1982). This theory remains a cornerstone in understanding the relationship between police visibility, fear of crime and community resilience (Kelling and Wilson 1982).

3.2 Routine Activity Theory (RAT)

Felson (2006) argues that shifting crime patterns whether spatial, temporal, tactical or social are best understood by examining how daily routines shape the convergence of six essential ingredients. He further states that these ingredients, as outlined in Routine Activity Theory (RAT), include motivated offenders, suitable targets, and a lack of capable guardianship, among others (Felson, 2006). This theoretical framework provides a situational perspective on crime, shifting the focus from individual offender motivations to the broader environmental and contextual factors that facilitate criminal behaviour (Felson, 2006).

Central to the study of direct-contact predatory crime within RAT is the concept of target value, which is defined from the offender's perspective (Felson, 2006). Felson (2000), emphasizes the value of a target depends on the offender's specific desires and intentions. This value may relate to tangible property that can be stolen or vandalized or it may concern human targets who could be attacked, kidnapped or otherwise victimized (Felson, 2006). Understanding whether offenders seek material gain, personal revenge, or other motivations is crucial for assessing the risks and vulnerabilities associated with potential targets (Felson, 2000). The theory highlights the importance of environmental and situational conditions in facilitating crime (Felson, 2000).

According to RAT, the spatial and temporal dynamics of crime are central to understanding its occurrence. Criminal acts are more likely to occur when routine activities create opportunities by bringing motivated offenders and suitable targets together in the absence of capable guardianship (Felson, 2000). This ecological approach to understanding crime has significant implications for crime prevention strategies (Felson, 2000). Miro (2014) notes that altering of routine activities, enhancing guardianship, or reducing attractiveness of targets can effectively reduce crime risks.

For instance, increasing surveillance, improving community cohesion, or securing valuable property can disrupt the convergence of the elements necessary for crime to occur (Miro,2014). By emphasizing the interaction between individuals and their environment, routine activity theory provides a valuable framework for studying crime(Miro, 2014). It extends beyond offender motivations to consider the larger social and environmental factors that enable or discourage criminal behaviour (Miro, 2014). This perspective allows for more holistic and targeted interventions aimed at mitigating crime and enhancing community safety (Miro, 2014).

4 METHODOLOGY

This is a “semi systematic literature review” paper which looked at secondary data that focuses on illegal mining and its impact towards mining communities (Cook et al., at., 1997; Crowther and Cook, 2007; Erriksson et al, 2022). A total number of 31 literature sources that extend over a broad spectrum of topics that investigated the etiology of illegal mining activities were collected. The semi systematic literature review was conducted through search engines and data bases such as google scholar, Sabinet African Journals and Science

Direct which made it possible to generate research and academic documents that are characterized by themes such as illegal mining, mining communities, crime, Zama-Zamas and other related themes. The researchers employed a systematic search strategy that entailed running multiple searches from the databases over a period of two months using the same set of keywords as mentioned above (Cook et al, 1997). The final data sources were limited to English research articles, reports, legislative statutes, dissertations, book reviews and newspaper articles covering key developments of the illegal mining approaches mainly in the South African context. Furthermore, the data derived was analyzed through the content analysis method which made it easier to form scientific arguments on issues surrounding illegal mining around the world (Khirfan, Perk, and Mohtat, 2020).

5 FINDINGS

This section reflects the key characteristics of the discourse around the etiology of illegal mining activities particularly in the South African context. Therefore, the discussion is arranged in the following themes:

- Drug trade and substance abuse,
- Impact on local law enforcement and justice systems,
- Economic crimes and money laundering,
- Corruption and bribery,
- Trafficking of metals and minerals,
- Human trafficking and exploitation,
- Increase in organized crime,
- Violence and crime-related conflicts and
- Disruption of Social Order and Trust.

5.1 Drug trade and substance abuse

Illegal mining activities have been regarded as the most significant activities utilized for drug trading in the underworld of Colombia (Rettberg, 2016). Furthermore, the drug trade activities within the mining communities are influenced by criminal networks under the auspices of armed conflict (Rettberg, 2016). Moreover, a typical example of a country perpetuated by drug trading and illegal mining is Colombia which has been infested by illegal organizations that have taken over the gold mining sector (Rettberg, 2016). These illegal mining activities are utilized as a resource to activate drug trading activities (Rettberg, 2016). Therefore, known armed organizations are utilizing drug trading as a funding mechanism for their activities hence the battle between the government and the Colombian leftist guerrilla Revolutionary Armed Forces known as Fuerzas Armadas Revolucionarias de Colombia (FARC) (Rettberg, 2016).

Zabyelina (2020) holds a view that the extensive growth in illegal mining activities around the world stems from other criminal activities such as drug trading and armed violence which seek to drive the contemporary entrepreneurial criminal organizations. Moreover, the illicit trafficking of minerals and drug trading stems back from the 1990s controlled by Latin American Cartels and African criminal gangs due to demand for mined commodities (Zabyelina, 2020). The illegal mining industry has become attractive to criminal syndicates as they often channel proceeds from the drug trade through the illegal mining networks. Similarly, literature notes that the involvement of these criminal syndicates enhance the avoidance of tax tariffs and disregard of mining rights through the illegal mining operations (Zabyelina, 2020). The South American region has been infested by high volumes of drug trading activities which have been influenced by the illegal mining industries as they generate profits of \$12-48 billion annually as per United Nations Environment Program and International Criminal Police Organization (UNEP and INTERPOL) (Zabyelina, 2020). Moreover, it is important to note that illegal mining operations do not only involve drug trading activities but also result in facilitating corruption and the disregard of the rule of law (Zabyelina, 2020).

5.2 Impact on local law enforcement and justice systems

Illegal mining is regarded as organized criminal activities that involve different role players whereby law enforcement officers and judicial officers get recruited into these illicit operations (Zabyelina, 2020). Knutsen (2016) highlights the effect of illegal mining on the capturing of political leaders and government officials in different parts of the world. Knutsen (2016) further stipulates that illicit mining of natural resources enhances the chances of corruption within political institutions. Literature further notes that the corruption in the illegal mining industry includes bribing police officials to disregard non-compliance with mining regulations that in turn impact significantly in the distraction of environment (Knutsen, 2016). Moreover, maladministration is an indicator of corruption activities within the mining industry as it involves the unlawful awarding of mining permits (Tegnan, 2021). The rise in illegal mining activities around the world has resulted in the increase of corrupt judicial officers as judges are bribed by operators and kingpins of illegal mining operations in an attempt to evade prosecution and be held responsible for their criminal activities (Tegnan, 2021). Furthermore, it is important to take into account that corruption does not only involve the law enforcement sector and judicial

sector but also involves the private sector (Tegnan, 2021). The private sector plays a pivotal role towards enhancing corruption activities as they pay large amounts in bribes for mining licenses. For instance, 80% of corruption cases for Mining Business Licenses in Indonesia involve the private sector (Tegnan, 2021). Moreover, corruption cases have taken a rise in countries that have mining activities as law enforcers and judicial officers are given gifts by business executives in violation of official regulations (Tegnan, 2021). The soaring of Gold prices in 2008 made room for corruption activities in the African continent whereby, Ghana was infested by Chinese miners who invested a lot in the illegal and small scale mining of Gold minerals (Crawford, 2017). Therefore, infestation of Chinese's miners towards the Ghanaian illegal small scale mining industry was due to the protection they received from top public officials, Chiefs and politicians as they received private payments (Crawford, 2017).

5.3 Economic crimes and money laundering

Salifu (2013) highlights that illegal mining causes economic crimes in different states around the world. Salifu (2013) further contents that these activities result in poor foreign investment and revenue generated. These activities do not get disclosed which later on affects the economy and hinders its economic growth (Salifu, 2013). In the context of Ghana literature highlights that the impact of illegal mining activities contributed to the destruction of farming communities which in turn resulted in the decline of the economy and also adversely impacted food security (Annan, 2024). Furthermore, illegal mining is a crime against the economy as government revenue and investor confidence get reduced by the activities which later on hamper economic growth within mining communities (Asuamah Yeboah, 2023). Illegal miners through their operations tend to avoid paying tax tariffs and regulatory fees by the mining sector which affects the government revenue. Additionally, illegal mining reduces revenue generated from the mining sector as royalties generated from mining profits are not declared and paid as they operate outside the regulatory framework (Asuamah Yeboah, 2023). Countries such as Ghana have lost \$2.3 billion in tax revenue due to illegal mining activities. As indicated elsewhere the short term benefit of illegal mining for community members creates an economic crime as the income generated by illegal mine workers is not taxed as its not declared to the relevant authorities which results in the government losing out on tax revenue that can boost the economy (Suglo, 2021). For instance, in South Africa the Northwest economic atmosphere has deteriorated drastically as the province is characterized by unemployment, crime and poverty due to the rise in illegal mining activities (Ojakorotu, 2024). According to Ojakorotu, (2024) the North West economy suffered a loss of 600 000 tones of chrome which makes up for 10% of the overall mined chrome in South Africa (Ojakorotu, 2024). Therefore, illegal mining has proven to be an attack on the economy as the mining sector is the largest contributor to the GDP where South Africa has suffered the cost as the country has lost R70 billion to illegal mining (Ojakorotu, 2024).

5.4 Corruption and bribery

In the context of South Africa, the growth in illegal mining is influenced by availability of abandoned mines due to the decline in large scale mining operations (Zabyelina, 2020). It is also worth stating that there are some illegal mining operations that occur on existing mines particularly in abandoned shafts (Zabyelina, 2020).

Illegal miners, also known as Zama Zamas, risk their lives to open cemented and sealed off shafts with explosives at abandoned mines where they travel up to 3kilometers underground to live and work for extended periods without the necessary protective gear and without regard for the impact of their activities on the environment (Chamber of mines of South Africa, 2016). The problem of corruption is widespread in areas where illicit mining occurs (Chamber of mines of South Africa, 2016). Law enforcement officers, government inspectors and mine security guards are frequently bought off by criminal syndicates to ignore their activities or allow them entry into places that are off-limits (Chamber of mines of South Africa, 2016). Such corruption fosters an atmosphere of impunity and weakens the implementation of regulations (Chamber of Mines of South Africa, 2016).

For example, there have been numerous reports of officials in South Africa taking bribes to allow illicit mining operations to continue (Transparency International, 2019; Chamber of Mines of South Africa, 2016). The online newspaper article published on the 20 January 2025 at the AP News website states that during the police operations at the abandoned mine in the Northwest province the suspected illicit gold mining mastermind escaped from detention with the assistance of police personnel (AP news, 2025). The newspaper article further submits that the suspect, identified as Lesotho national James Neo Tshoaeli also known as "Tiger," was among those who emerged from the mine near the town of Stilfontein and later disappeared from police custody (AP news, 2025).

This prompted an investigation that resulted to the arrest of four police officers alleged to have assisted his escape from incarceration (AP news, 2025). According to DRC (2025), the state mining corporation Gecamines in the Democratic Republic of the Congo (DRC) embezzled more than \$300 million between 2012

and 2020. It is further theorised that such large-scale corruption hampers the nation's economic progress and perpetuates illegal mining activities (DRC, 2025).

5.5 Trafficking of metals and minerals

Environmental crimes encompass a wide variety of unlawful actions that damage the environment, either globally or locally (United Nations Office of Drugs and Crime, 2023). These include:

- crimes against wildlife,
- illegal timber product trafficking,
- fisheries-related crimes,
- waste trafficking, including hazardous material trafficking,
- illegal metals and minerals trafficking (United Nations Office on Drugs and Crime, 2023).

Seeing that organized crime networks control illegal mining and trafficking of metals and minerals across the globe, these phenomena have drawn the attention of the international community. (United Nations Office of Drugs and Crime, 2023). According to the United Nations Office of Drugs and Crime (UNODC) (2023), organized criminal groups can infiltrate the legitimate supply chains of mining companies with an intention of laundering money that is made from illicit mining and trafficking of metals and minerals.

5.6 Human trafficking and exploitation

According to the United Nations Office of Drugs and Crime (2023), criminal organized groups that operate in the illicit mining industry are also involved in human trafficking, sexual exploitation, forced labour, child labour, extortion, forced relocation, kidnapping and migrant smuggling. In 2022, the then South African Minister of Mineral and Energy Mr. Gwede Mantashe stated during a parliamentary debate that illegal mining is linked to violent crimes that include inter alia femicide and Gender-Based Violence (GBV), as well as highly significant crimes such as illicit financial flows. Furthermore, this type of crime has been connected to the smuggling of explosives, guns and human trafficking (Verite, 2016). In an effort to circumvent the regulatory frameworks that govern legal markets of metals and minerals illegal miners and syndicates smuggle valuable minerals including gold, diamonds and platinum through the black market (Verite, 2016).

Migrants and other vulnerable people are frequently trafficked and used as labour in illicit mining operations (U.S. Department of State, 2024). Syndicates prey on people in dire need of money and expose them to hazardous and exploitative labour practices (U.S. Department of State, 2024). In the Orinoco Mining Arc (OMA) in the south of Venezuela, children are particularly vulnerable to human trafficking (Lambertini, 2023). Children as young as seven years old are frequently found in mining regions alone, making them susceptible to exploitation or human trafficking (Cuevas et al. 2019). Adolescent boys and kids as young as nine or ten years old are also employed in the mines (OHCHR 2020). They put their lives and health at risk by engaging in hazardous mining-related activities or coming into contact with contaminated materials (International Crisis Group, 2019).

Additionally, criminal organizations use them as informants or watchmen (Lambertini, 2023). They typically recruit women for domestic and or sexual exploitation and men for labour exploitation or membership in their organization, which is linked to the armed control of the area and no one is exempted from being a victim of either of these crimes or even the combination of them (Lambertini, 2023 as cited in Moya 2020). The conditions set by the criminal organization of the mining area force women to work in mining and all related jobs such as serving as Chefs, Vendors, or Laundresses in mining camps (Lambertini, 2023 as cited in Moya 2020). Women find that the work environment is connected to sexual exploitation and occasionally they are misled about the nature of the job and working circumstances (Lambertini, 2023). Consensual sex labour is either conducted in neighbouring cities or in "currutelas", which are bars constructed out of wooden boards found in mining areas (Lambertini, 2023). The majority of the revenues go to the business owners or the criminal organizations who govern the area, even though women who provide sexual services are frequently compensated in gold (Lambertini, 2023).

5.7 Increase in organized crime

Geldenhuis, (2024) states that organized crime has a significant impact on the rise of illegal mining activities. Illegal mining operations provides opportunities for transnational syndicates to rapidly expand their footprints across borders and enlarge their networks (Geldenhuis, 2024). This is facilitated by an involvement of cartels that deal illegally in precious metals and diamonds (Tar, 2022:280). It is estimated that illegal mining costs South Africa R7 billion Rands per year while it has a well-managed five-tier market system (Tar, 2022:280). Tar, (2022:280) further submits that the five-tier market system consists of the following: illegal miners, buyers on the surface, around the mine, regional bulk buyers, national and international distributors as well as top-tier companies.

The Minerals Council of South Africa highlights the strong link between illegal mining and organized crime, with many illegal mining operations very often led by internationally connected criminal syndicates (Tar, 2022:280). These illegal miners are often armed with explosives, setting traps and ambushes mine workers, security personnel and rival groups of illegal miners (Tar,2022:280).

5.8 Violence and crime-related conflicts

Violence and crime-related conflicts have escalated in South Africa's mining areas, where procurement gangs, illegal miner militias and well-organized criminal networks have turned mining sites into conflict zones (Lebitso and Mabudusha, 2023). Illegal miners face daily dangers, including frequent shootings and violent clashes with rival groups (Lebitso and Mabudusha, 2023).

Illegal Miners are divided into three categories: underground miners, surface miners, and hitmen (Lebitso and Mabudusha, 2023). Hitmen do not work underground and do not work for kingpins as opposed to underground and surface illegal miners (Lebitso and Mabudusha, 2023). Hitmen murder the underground miners and take their bags that contain extracted minerals (Lebitso and Mabudusha, 2023). The conflicts between different ethnic groups in mining areas lead to high rates of assaults, fights, murders and attempted murders (Lebitso and Mabudusha,2023). Therefore, hitmen pose a threat not just to illegal miners but also to local communities, where they commit violent crimes like mugging residents for valuables such as phones, wallets, and jewelry (Lebitso and Mabudusha, 2023). Some kingpins are willing to pay mine workers, former mine employees, security officers and police members cash amounts equivalent to four months' salary (Geldenhuis, 2024). However, those who refuse to be bribed or corrupted may become targets of the criminal syndicates and, in some cases, are murdered (Geldenhuis, 2024).

5.9 Disruption of Social Order and Trust

Collusion and corruption within illegal mining are widespread and have significant social, economic and environmental consequences (Geldenhuis, 2024). The kingpins orchestrating illegal mining activities are seldom arrested (Geldenhuis, 2024). Criminal syndicates are willing to pay substantial amounts of money to collaborate with mine workers, former employees, security officers and even police personnel (Geldenhuis, 2024). Police members assist syndicates with selling confiscated gold from rival dealers, provide protection for them and facilitate the escorting of illegal miners to mining sites (Geldenhuis, 2024). Similarly, mine employees and security officers are also bribed to help get illegal miners underground by escorting them to underground sites or by entering the mine dressed and equipped as legal mine workers (Geldenhuis, 2024). This widespread corruption erodes the community's trust in law enforcement (Geldenhuis, 2024).

6 Conclusion

With regards to findings made in relation to the study, it was concluded that the proliferation of illegal artisanal mining is a burning issue in the Gauteng province. "Worth noting is the fact that illegal mining permeates various aspects of society such as socio-economic conditions, political factors and policing matters among others" (Phala, 2017).In conclusion, this article discovered that the growing trend of illegal artisanal mining remains a key challenge that perpetuates violent crimes in South Africa notably in Gauteng as it has had a severe effect on the socioeconomic conditions in the province. Furthermore, the research article resolved that illegal artisanal mining activities take place in both abandoned and closed shafts of active mining premises. The research article has also discovered that illegal artisanal mining does not only contribute to higher levels of crime in mining communities but has resulted in the government losing out on large amounts of revenue that is generated from mining activities. Moreover, literature further note that there are certain legitimate companies which utilise illicit artisanal mining networks to maximise profits and tax evasion. Additionally, illegal artisanal mining has influenced the rise in illegal immigration from various countries across the African continent particularly from neighbouring countries. The study further notes that this migration is mainly influenced by the search for better opportunities with the intention of escaping poverty from the counties of origin. It is within this context that the illegal immigrants often fall victim to infiltration by organised criminal networks. The evidence at our disposal further highlights that the proliferation of illegal artisanal mining activities in Gauteng adversely impacts the social fabric of communities adjacent to the abandoned mines. This is precisely due to the number of crimes that are perpetuated by different gangs that are involved in the illicit mine operations.

7 Recommendations

The present paper proposed the following interventions to address the ongoing challenges posed by illegal mining activities and their associated impacts on crime levels in Gauteng:

7.1 Regulatory framework for artisanal mining

- There is a need to fast-track the development of the legislative framework to formalise the establishment of artisanal and small scale mining in South Africa.

7.2 Law enforcement of mining regulations

- The state needs to build capacity to enforce the current legislation that regulates mining operations in the country,
- Strengthen border policing to prevent the influx of illegal immigrants, and
- It is critical for all stakeholders that are involved in the mining value chain to develop strategies to combat criminal elements in the current illegal artisanal mining operations.

7.3 Future research

- It is recommended that more research needs to be done on how illegal artisanal mining can be legalised in an attempt to tackle the issue of unemployment and poverty within mining communities, and
- There is a need to examine the extent to which mining companies use illegal artisanal mining operations to maximise profit and evade taxes.

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