



# The Effects of Illegal Mining on Socio-Economic Development of North West Province, South Africa

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## Abstract

This paper focuses on the effects of illegal mining in North West Province, South Africa. It is one of the country's most resource-endowed provinces and, as a consequence, is affected by the menace of illegal mining. This paper, based on the synthesis of political ecology and the Dutch disease syndrome, argues that illegal mining in the North West Province of South Africa is a function of the political and economic structure of South African society over history and how the province has become resource-dependent over the years. This then led to the weakening of the manufacturing and agricultural sectors of the provincial economy and pushed jobless youths and criminally-minded people around mines to engage in illegal mining. It adopted a qualitative method based on data from extant sources. It found three dimensions to the socioeconomic challenges of illegal mining in the North West Province. It concludes that the foregoing is a function of the historical injustice of resource exploration and the weakening of critical sectors of the provincial economy. The paper recommends a multi-faceted approach to finding solutions to the menace.

## Keywords

Illegal mining, Mineral resources, Socioeconomic development, North West Province, South Africa

## 1. Introduction

North West Province is one of the most endowed provinces in South Africa, with natural resources such as gold, uranium, diamonds, platinum, chromite, ferrochrome smelters, fluorspar, vanadium, rhodium, limestone, slate, phosphate, manganese, coal, nickel, and copper. The contributions of North West Province to the country's economy are enormous; for example, it contributes about 64% of South Africa's platinum, 46% of its dimension stone and granite, 32% of its chromite, and 25% of its gold (Gandiwa & Gandiwa, 2012; Cabeza et al., 2019; Achina-Obeng & Aram, 2022). With these feats, the province is expected to be leading in all socio-economic indicators, such as reduced poverty, job creation, social security, access to healthcare facilities, improved social service delivery, and a competitive local economy (Aryee et al., 2003; Hinton et al., 2003; Owusu-Nimo et al., 2018). However, the reality in the province shows that these mineral resources are illegally mined, with little or nothing to show for their massive mineral endowment. This illegality impacts negatively on the socio-economic development of the province.

Socially, citizens within the province suffer from health hazards caused by chemical radiation from the illegal mining of gold and uranium, incessant insecurity, pollution, damage to vegetation, and insufficient social services (Chakuya et al., 2021). In some severe cases, mining minerals often involve mercury and other heavy metals, adversely affecting biodiversity (Bergeron et al., 2011; Gandiwa & Gandiwa, 2012; Markham & Sangermano, 2018). Economically, the province is grappling with unemployment, poverty, capital flight, a decline in local industrialization, and a volatile atmosphere for investment (Takyi et al., 2021). Agriculturally, the province also suffers from problems such as open pits, which stimulate soil erosion, loss of soil fertility, and a decline in the aesthetic value of the landed areas of the province (Prasetyo et al., 2010; Eklund et al. 2016).

With the increasing trend of illegal mining of mineral resources in North West Province, the socio-economic conditions of citizens living within the province have continued to be threatened. Apart from threatening biodiversity conservation, pollution, environmental degradation, and harmful chemical inhalation from illegal gold mining are life-threatening and impoverishing. In South Africa, efforts have been combined to lessen the negative effects of illegal mining through special task forces such as the Hawks Organized Crime Force, yet minimal success has been recorded (Gandiwa and Gandiwa, 2012; Owusu-Nimo et al., 2018; Cabeza et al., 2019).

In essence, this study focuses on how to mitigate the problem of illegal mining in the North West Province and the resultant socio-economic crisis that illegal mining generates within the province. The study will also seek to

complement various governmental initiatives, especially those of municipalities within North West Province, focusing on the curbing of illegal mining, particularly at almost 300 mining sites in the province, and other governmental initiatives that focus on the productive management of mineral resources in the province.

Drivers of illegal mining in the North West Province have remained multifaceted and often overlapped. In the recent past, however, such stimulating factors as poverty, hunger, unemployment, lack of effective control of mining sites by security agencies, weak punishment strategies, communal conspiracies to steal mineral resources, weak institutional frameworks, and an obvious lack of economic opportunities in the province have continued to make illegal mining a viable expedition among a mostly youthful population. At the provincial level, however, recurrent government failures and bad governance (the inability of the provincial or municipal governments to deliver good governance), which, in turn, impoverish people, especially idle youths, have been implied as major stimulators of illegal mining, and the budding demographic dividend in the province has been noted as the primary stimulating factors of idle unemployed youths in the illegal transactional web of illegal mining in the North West province. Ordinarily, the inherent youthfulness in all of these processes should have been a veritable platform to stir substantial economic growth and spur sustainable human development in the North West Province. Therefore, the seeming intractability of the challenges that illegal mining has posed to the province's socio-economic development intentions will be the focus of this project.

## 2. Illegal Mining: Conceptual Analysis

Illegal mining has become a popular discourse in literature. This is because of the growing incidence of this phenomenon across resource-rich countries. It involves informal mining activities that go on below the radar of the authorities. The INTERPOL defines it as “an umbrella term covering both illegal extraction and trade of minerals, including the illegal use of toxic chemicals (such as cyanide and mercury) in mining activities” (INTERPOL, 2022:7). The United National Office on Drugs and Crime (UNODC) defines illegal mining as;

*“Mining activity that is: (a) carried out by a person, natural or legal, or a group of people without complying with the requirements of applicable laws or administrative regulations that govern these activities; or (b) carried out in areas where the exercise of such activities is prohibited or using prohibited equipment, devices or chemicals”* (UNODC, 2023:3).

Agunyai et al (2022) agree with the foregoing definitions by positing that illegal mining is the mining of mineral resources without the state, province, or municipality's permission. It is the looting and stealing of mineral resources without any mining permit or mining license. It is simply an activity against the state or province's extractive or land tenure laws. Illegal mining maps or tracks precious minerals such as gold, uranium, limestones, diamonds, and any other minerals in high demand in the market (Hinton et al., 2003; Gandiwa & Gandiwa, 2012; Wilson et al., 2015). It sometimes involves using rudimentary machines with low production and, in some cases, moving from one site to another depending on the mineral availability (Gandiwa & Gandiwa, 2012; Owusu-Nimo et al., 2018).

It also involves using very simple technologies and limited professional planning; sometimes, it is seasonal and temporal (Dethier et al. 2019). Illegal miners lack the authorisation to carry out their activities, so they depend on these simple and rudimentary techniques and technologies to get the leftover resources in the mines. These activities are largely carried out in abandoned mines and some operating mines (Portfolio Committees on Mineral Resources and Energy, Home Affairs and Police on the Joint Oversight Visit on Illegal Mining to Five South African Provinces, 2022). In the case of abandoned mines, illegal mining commences when once authorized miners stop operating a mine and subsequently close it while in certain situations. These situations are replete in resource-bearing communities that have attracted low-income mine workers, many of whom later engage in illegal mining activities.

## 3. Theoretical Framework

The study is theoretically anchored on the Political Ecology approach and the Dutch Disease Syndrome. The political ecology approach is a wide field that links politics and the economy in the understanding of the environment and nature. It posits that access to and resource use is a function of the power relations that undergird society's social configuration. As an approach, it hinges on the cost-benefit analysis of resource exploitation in society (Robert, 2020). It holds further the cost-benefit analysis demonstrates the nature and character of the socioeconomic inequality in society. In the same vein, the approach contends that the use of resources is a function of access to them because people who have better access to resources tend to be socioeconomically better than those who do not. Hence, the political ecology approach holds that socioeconomic inequality is a function of access to resources (Robert, 2020).

The political ecology approach centres around the discourse of the power relations that shape access to and the use of resources and environmental change. It takes environmental change and its consequences as political issues, embedded in governance frameworks and institutions (Skallis, 2014). The theory holds that many environmental changes and their associated problems, including disasters, conflicts, and even illegal environmental activities should not be seen as mere problems in themselves, rather they are products associated with the distribution of political and economic power in society. Relevant to this paper, the theory holds that historical mining is a political and economic reality of South African society during the era of Apartheid and the inability of the post-Apartheid governments to undo them. It holds that illegal mining is a product of this political and economic configuration.

The Dutch disease syndrome or resource curse is a theory that speaks to the ability of resource abundance and dependence to lead to the weakening of other sectors of society's economy and therefore, aggravate its underdevelopment. According to Rudd (1996), Dutch disease is the impact of the natural resource boom on critical sectors such as manufacturing and agriculture. The theory holds that Dutch disease shifts attention from these sectors and focuses on proceeds from natural resource extraction. In many climes over history, once society experiences a boom in one natural resource or another, it tends to lose track of its ability to galvanize sectors that are necessary for its industrialisation and it is already industrialised, it facilitates its de-industrialisation (Murshed, 2018). This is because the economic boom from resource extraction can provide the financial wherewithal for societal process initially but the reality of lack of industrialisation or de-industrialisation sets in because over some time, the jobs which manufacturing and agriculture should provide are not there.

In nexus, this study theoretically argues that illegal mining in the North West Province of South Africa is a function of the political and economic structure of the South African society over history and how the province has become resource-dependent over the years. This then led to the weakening of the manufacturing and agricultural sectors of the provincial economy and pushed jobless youths and criminally-minded people around mines to engage in illegal mining.

#### 4. Materials and Methods

This is a qualitative paper based on secondary data on illegal mining in South Africa and North West Province in particular. Data was sourced from databases such as Google Scholar, Sabinet, Scopus, Web of Science, and Scimago in articles focusing on themes such as illegal mining, resource policy, mining policy, Zama Zama, illegal mining in South Africa, illegal mining in South Africa, illegal mining and socioeconomic development and other related themes. The journal articles were complemented with data from diverse sources, including government publications, newspapers and magazines, and relevant internet sources. The data were then analysed using the content analysis method. This allowed the researcher to make meaning of the various issues in illegal mining in the North West Province of South Africa.

##### 4.1 Illegal Mining and the Dynamics of Natural Resource Mining in South Africa

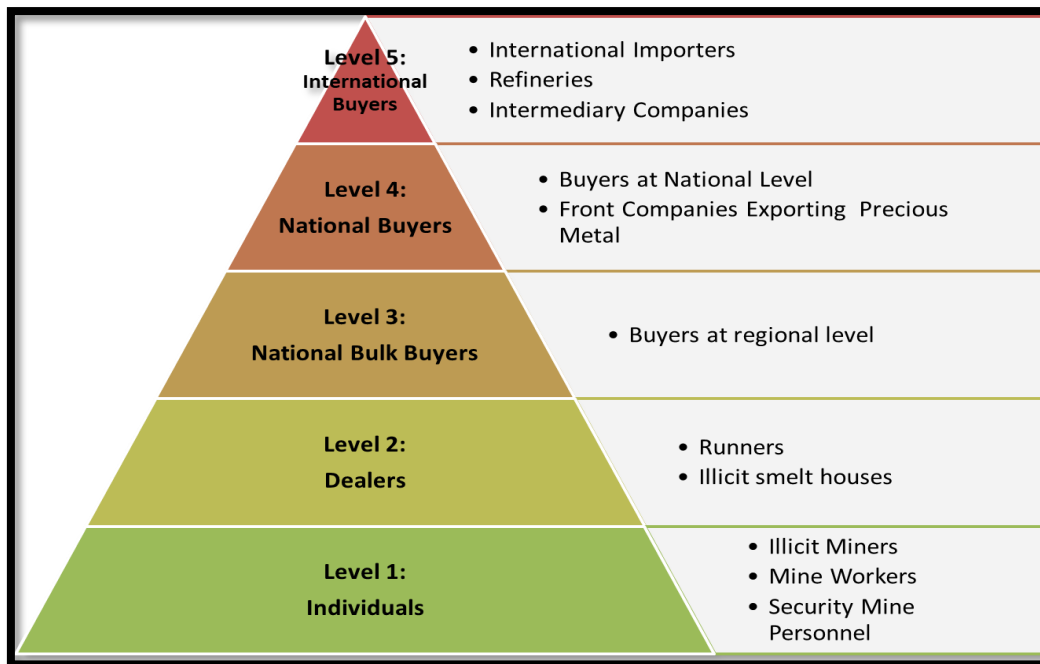
One of the negative lived realities of South Africa's resource endowment is illegal mining. The country is arguably the world's most endowed nation in some resources. These include Platinum and Manganese (Mangolin, 2024). The country is also one of the leading producers of gold, having held the leading producer for years in the past (source youtube). The mining sector is one of the main drivers of the South African economy. According to Mining Council South Africa, the mining sector contributed R493.8 billion to the country's GDP in 2022 and yielded R14.2 billion to its coffers in 2021 (Mining Council South Africa, 2022). The huge endowment of the country in natural resources is demonstrated by the fact that mining is the largest sector in the economy of at least five of its nine provinces (Alexander, 2021). Therefore, natural resource mining is a pervasive economic activity in South Africa.

While mining is a leading contributor to South Africa's economy, the phenomenon of illegal mining is more serious in incidence and magnitude. A recent report by Portfolio Committees on Mineral Resources and Energy, Home Affairs and Police on the Joint Oversight Visit on Illegal Mining to Five South African Provinces (2022) shows that illegal mining of varying magnitudes is happening in not less than five provinces in the country. This pervasiveness of illegal mining in South Africa has been blamed on many factors. Given the country's long history of mining, spanning several centuries, there has been a rise in the number of abandoned mines. The number of abandoned mines in the country was recently put at around 6,000 being formerly used in the production of Chrome, gold, platinum, iron ore, manganese, coal, diamonds, aggregate sand, and other Industrial minerals (Portfolio Committees on Mineral Resources and Energy, Home Affairs and Police on the Joint Oversight Visit on Illegal Mining to Five South African Provinces, 2022). Illegal miners besiege open mining pits for days and sometimes months in search of mineral resources. This high number of abandoned mines has provided an avenue for resource scavengers to explore them for leftover mineral particles that can be sold to ensure their subsistence. In the case of gold mines around Johannesburg, the high cost of gold mining has forced many mining companies to abandon their mines, thereby providing an avenue for illegal miners to feast on such mines for gold particles.

This high youth unemployment rate is another factor fuelling illegal mining. This rate has been on the rise in the past few years, with the latest declaration by Statistics South Africa (Stats SA) putting it at 32.9% in the first quarter of 2024 (South African Government News Agency, 2024). This situation feeds illegal mining with willing hands to explore abandoned mines and form an extended value chain around illegal mining in the country. While natural resource mining's workforce has been dominated by cheap migrant labour over the centuries, and literature largely agrees that illegal migrants from neighbouring countries largely do illegal mining, there is evidence that more and more South Africans may have been engaging in it in recent times (Phakisi-Portas et al., 2023). This situation provides more security stress for South Africa as the criminal value chain is likely now being occupied by South Africans.

Illegal mining has a vast value chain in South Africa ranging from the illegal miners to the top-end international-level actors. Portfolio Committees on Mineral Resources and Energy, Home Affairs, and Police on the Joint Oversight Visit on Illegal Mining to Five South African Provinces (2022) affirm the vast criminal value chain attached to illegal mining in South Africa. Figure I below show the tiered structure of the illegal mining value chain as presented in the Committees' Report;

Fig. I Criminal Value-Chain of Illegal Mining



*Source: The Portfolio Committees on Mineral Resources and Energy, Home Affairs and Police (2022).*

The above figure shows that illegal mining is well-entrenched within South African society and economy. To this extent, illegal mining can be said to have assumed the status of organised crime in the country. This position is hinged on the rise of many groups across mining communities laying claim to abandoned mines and portending security threats to those communities.

Natural resource exploitation in South Africa has a chequered history. This is because of the historical antecedents of South Africa as a state within the context of colonialism and Apartheid. As a result, mining has been a historically white-dominated sector. To this extent, many have argued that the historical exclusion of black South Africans from the sector is also fueling illegal mining in the country (Bester, 2019). In the same vein, Thorton rejected the labeling of unauthorized mining as illegal mining, rather what is tagged as illegal mining should be seen as Artisanal Mining (2014). Given the fact that Black South Africans are more economically backward than their White counterparts, artisanal miners are motivated to engage in their trade, 'illegal mining' to get themselves some part of South Africa's mineral riches (Bester, 2019). This serves to justify the position of Phakisi-Portas, van Wyk & Sefuli (2023) that South Africans now engage in illegal mining. Hence, the situation is going to make illegal mining an intractable socioeconomic problem in South Africa in the near future.

In terms of mining policy and legislation in South Africa, the enabling laws for mining do not capture artisanal mining. Hence, by the definition of South African mining laws, artisanal mining is illegal mining because they do not capture such reality. Thorton (2014) notes that despite the economic transformation potential that the illegal mining sector holds, South African authorities continue to ignore illegal miners to fully capture the economic essence of the sector. Furthermore, South African mining laws are opaque and weak in addressing illegal mining in the country (Thorton, 2014). This is because the laws do not declare Zama Zama illegal outright. To this extent, the potential positive contributions of artisanal mining, albeit taken as illegal have not been tapped by the system. This is because artisanal miners create multiple jobs with an average of 10-20 employees per miner (Thorton, 2014). Thus, with low legal coverage of mining policy and weakness of mining laws, illegal mining remains a serious socioeconomic problem in South Africa. Lastly, there is an external dimension to illegal mining in South Africa. Apart from the historical dominance of foreigners in mining labour and later illegal mining in the country, there is a burgeoning international market for illegally-mined mineral resources in South Africa. This is noted by the Portfolio Committees on Mineral Resources and Energy, Home Affairs, and Police on the Joint Oversight Visit on Illegal Mining to Five South African Provinces (2022) that illegally mined resources from South Africa are transported to neighbouring countries' ports such as Maputo Harbour in Mozambique. To the extent that such outlets exist in the illegal mining value chain, the international market for cheap mineral resources is fueling illegal mining across African countries, including South Africa. The challenge of border porosity in South Africa is not only about the inflow of illegal migrating heading for abandoned mines, it also speaks to the ease of transporting illegally mined minerals out of the country. Thus, the external element in illegal mining in South Africa thrives on weak border control which demonstrates how easy it is move to things in and out of the country.

#### 4.2 Illegal Mining in North West Province

Illegal mining is endemic in the North West of South Africa. The province is one of the most affected by the phenomenon in the country. According to Portfolio Committees on Mineral Resources and Energy, Home Affairs, and Police on the Joint Oversight Visit on Illegal Mining to Five South African Provinces (2022), the province is one of the leading



provinces in the incidence of illegal mining in South Africa. As a resource-rich province with many abandoned platinum, gold, and chrome mines, the incidence and magnitude of illegal mining have become a serious problem. The South African Police Service (SAPS) (2022) notes that the North West Province has at least 12 illegal mining hotspots in South Africa, second only to the Gauteng Province's 13 hotspots. These hotspots include Brits, Mooi-nooi, Klerksdorp, Hartbeesfontein, Stilfontein, Khuma, Kanana, Diamonds Taung, and Wolmarstad Clusters and in the Mahikeng area, Diamonds Bakerville, Sannieshof area and Setlagole.

The spate of illegal mining in the North West Province covers the major mineral resources that it possesses in abundance such as diamond and chrome. In the case of illegal chrome mining, the province has become a major hotspot in the country. According to the Global Initiative Against Transnational Crimes illegal mining in the metal has assumed a frightening proportion (2022). Illegal mining is ongoing in at least three of the province's four Municipalities, which are Dr Kenneth Kaunda, Bojalana Platinum, and Dr Ruth Segomotsi Mompati Municipalities. Illegal miners are feasting on not less than 23 closed mine shafts covering the Vaal Reefs and Harties Mine (South African Police Service, 2022). This demonstrates that the phenomenon is thriving even in the face of government and security stakeholders' intervention. The drivers of illegal mining in North West Province are largely the same as those obtained across South Africa. However, the province's situation on illegal mining is marked by some serious issues. These issues have brought out the fault lines in South Africa's mining policy process. First, illegal mining has brought about the possibility of the state-traditional institution face-off in North West Province and South Africa in general. This is because the traditional institutions have been alleged to have taken on the role of the Department of Mineral Resources and Energy by issuing mining licenses to illegal mining (Portfolio Committees on Mineral Resources and Energy, Home Affairs, and Police on the Joint Oversight Visit on Illegal Mining to Five South African Provinces, 2022). This situation speaks to the precarious situation in which South African policy and politics are because there are many grey areas in mining law and policy in the country. It also brings to the fore the issue of land politics in the country. South African land and mineral resources law vests the responsibility of mining underground resources in the state but the land belongs to the Traditional Institutions (Portfolio Committees on Mineral Resources and Energy, Home Affairs, and Police on the Joint Oversight Visit on Illegal Mining to Five South African Provinces, 2022).

Furthermore, the illegal mining situation in North West Province is such that there are possible intergovernmental relations rife between national institutions and the province regarding the possible complicity and or ineptitude of the latter in mineral resources administration which aids illegal mining. Portfolio Committees on Mineral Resources and Energy, Home Affairs, and Police on the Joint Oversight Visit on Illegal Mining to Five South African Provinces (2022) notes that the province was not clear on the ownership of certain mining rights upon which some mining activities were based in the provinces. This includes mines in Vogelstruisnek/Witrantjies and Moloagane Village where some of the most serious illegal chrome mining is taking place. The reports stopped short of indicting the Provincial government as it could not provide clear explanations of the mining process going on in those places in the province. The import of this is that subnational governments and institutions have to be involved to ensure that mining takes place with the necessary permissions of the state. Hence, once there is a weakness at any level of governance on mining, it produces illegal mining and its many associated ills.

Lastly, another driver of illegal mining in North West Province is the lack of synergy among government institutions on the mining process in the province. For example, the Department of Mineral Resources and Energy and the South African Police Service have largely worked in silos in their efforts to curb illegal mining in North West Province (Portfolio Committees on Mineral Resources and Energy, Home Affairs, and Police on the Joint Oversight Visit on Illegal Mining to Five South African Provinces, 2022). This situation has not allowed these and other relevant institutions to share knowledge and collaborate effectively to address illegal mining in the province. This situation largely accounts for the high rate of illegal mining across the province. Inadequate inter-institutional synergy in addressing an issue such as illegal mining leads to inefficient enforcement of mining policies and laws, possible duplication of efforts, and even inter-institutional rivalry and conflicts. This is very important in addressing crimes associated with illegal mining that have been on the rise in North West Province.

As a resource-rich province producing about a quarter of South Africa's natural resources, illegal mining has become an allure in the province. Rather than giving socioeconomic succour and development to the nation, province, and people, resource abundance is latently producing issues and challenges in North West Province. The province is reeling from the many effects of illegal mining. These are discussed exhaustively in the next section.

#### **4.3 Effects of Illegal Mining on Socioeconomic Development in North West Province**

The effects of illegal mining on the socio-economic development of the North West Province of South Africa are many and mounting as the government and other stakeholders consider how to address the issue. These effects are grouped into economic, social, and environmental categories.

##### **- Economic Effects of Illegal Mining in North West Province**

The economic effects of illegal mining in North West Province are grave. This is because illegal mining is a direct attack on the ability of the province and South Africa in general to leverage the resource abundance of the province for economic development. Since there is a direct link between negative economic practices such as illegal mining and the negative economic performance of the government, the North West Province is not immune to its effects.

First, illegal mining saps the government of the province and the national government of their ability to draw adequate taxes from mining operations in the province. Since illegal mining is tantamount to the acquisition of mineral resources through the abeyance of official permits and recognition, there is a direct diversion of financial resources accruable to the government from such mining sources. For example, of illegal chrome mining, North West Province and South Africa lose about 600,000 tonnes of chrome which translates to 10% of the total mined chrome in the country (Global Initiative Against Transnational Crime, 2022). Furthermore, South Africa lost R70 billion to illegal gold mining of which the North West Province lost a significant part, being one of the gold-rich provinces in South Africa (Augustine, 2024). Given that mining is the largest tax-contributing sector to the economy of the North West Province, illegal mining is an attack on the province's economy.

Illegal miners are very destructive. This is because illegal mining has led to the destruction of infrastructure belonging to the public and mining companies in the province. According to Portfolio Committees on Mineral Resources and Energy, Home Affairs, and Police on the Joint Oversight Visit on Illegal Mining to Five South African Provinces (2022), illegal miners destroyed infrastructure through the theft of copper cables and illegal electricity connection. Illegal electricity connection for illegal mining purposes is costly and affects the ability of electric service providers to efficiently service their clients. This finds expression in the processing of chrome which consumes about 5% of South Africa's total electricity output. Hence, if illegally mined chrome is also surreptitiously refined by the illegal mining syndicates in the province, that constitutes a massive loss of revenue from both the mined resource and electricity. Illegal mining also involves an intensive use of water. To this extent, North West Province which is water-threatened (North West Provincial Government, 2021) also loses the necessary revenue from water consumption. Other infrastructure under threat of and or destroyed by illegal miners include street lights, sewer, and drainage systems (Portfolio Committees on Mineral Resources and Energy, Home Affairs, and Police on the Joint Oversight Visit on Illegal Mining to Five South African Provinces (2022)).

As a natural resource-dependent province, the North West is suffering from the Dutch disease syndrome in that resource abundance is fueling the weakening of other sectors of the economy. For example, the ability of youths to get quick money through illegal resource mining is a disservice to the agricultural sector. Thus, this unwillingness affects food security in the province as illegal mining saps the agricultural sector of the needed manpower to yield maximum output. In the same vein, illegal mining saps the manufacturing sector of manpower as the former encourages the unwillingness to seek employment in the latter. As in other resource-rich climes, increased reliance on resource extraction, especially through illegal mining weakens other critical sectors of the economy.

Since illegal mining is largely an organised crime, it facilitates financial crimes such as money laundering and the financing of criminal activities in North West Province. This is evidenced by revelations by the South African Police Service (2022) on the humongous amount of money recovered from illegal miners in the province between January and December 2021 amounting to a total of R431,000 in cash. This situation poses a significant threat to the provincial and national economy because funds generated from an illicit economic engagement like illegal mining find their way into the economy and most often, outside of the economy because of the high number of foreign nationals engaged in the trade. This means there is a high possibility of undeclared monies in the economy and this is usually used to fund criminal activities. Therefore, illegal mining does not bode economically well for North West Province.

#### - *Social Effects of Illegal Mining in North West Province*

Illegal mining has serious social effects in the North West Province. In line with the negative social reality of resource-rich environments, resource abundance continues to fuel social issues and challenges in the province. These negative social effects have made socioeconomic development in the North West tenuous.

Illegal mining is one of the main harbingers of crime in the North West Province. The resource-bearing communities in the province are some of the most unsafe in the province. Illegal mining has become a serious problem in the North West Province of South Africa. Illegal mining has turned the ever-peaceful province into a hot and volatile zone and home for criminals, who parade ammunition like guns and other deadly weapons to carry out their illegal mining operations. Today, the province is prone to attacks and counter-attacks and largely insecure due to gun battles between security agencies and illegal miners. This in itself engenders insecurity and instability, which in turn affects the livelihood of citizens in the province. As a result of the violence and unrest at many of the mining sites in the province, local investment in agricultural production has been declining, and the local economy's competitiveness is waning steadily due to illegal mining. This is evidenced by the revelation by the South African Police Service (2022) that over 800 arrests and thousands of firearms, kilograms of illegally mined resources, mining equipment, and other materials were recovered in the province in 2021.

Illegal mining is a socially controversial endeavour in South Africa. With the country's chequered history of racial segregation and its attendant socioeconomic effects, illegal mining brings to the fore critical fault lines of South Africa. This produces serious mining governance challenges in the country, including North West as illegal miners are taken by many observers as artisanal or junior miners whose activities the country's mining laws do not recognise. This is to the extent it has been argued that the bulk of artisanal miners constitute South Africans who have been historically excluded from benefitting from their country's mineral abundance (Bester, 2019; Williams 2019). Hence, in the North West Province, South Africa's history is hurting the ability of stakeholders to agree on the incidence, effects, and

solutions to the phenomenon as a menace. Furthermore, the historical racial and economic loggishness is stifling the ability of South Africa to produce clear and wholly implementable policies that are devoid of grey areas that illegal miners and their enablers leverage in the country.

In many of the rural areas in North West Province where illegal mining occurs, there is the development of the equivalent of what Onuoha (2014) referred to as ‘oil psychology’ in the Niger Delta of Nigeria that allows people in resource-bearing communities to become entitled and rely on free money from illegal mining and its associated crimes. The fact that South Africans are now engaging in illegal mining and occupy strategic positions in its value chain speaks to this reality (Phakisi-Portas, van Wyk & Sefuli, 2023). The possibility of getting free money from the illegal mining value chain and the endemic poverty in rural South Africa make this situation scary. This is coupled with the rise of many criminal gangs around mining communities and fueling dangerous and fatal gang violence in these areas (Portfolio Committees on Mineral Resources and Energy, Home Affairs, and Police on the Joint Oversight Visit on Illegal Mining to Five South African Provinces, 2022). Hence, illegal mining is fueling resource conflict in North West Province.

Illegal mining brings to the fore grave labour relations reality in North West Province. The working conditions associated with illegal mining violate the labour laws of South Africa that the province operates. More importantly, illegal mining is done in abeyance of the high safety details that mining activities entail. Hence, the safety of miners on the job is secondary to the illicit financial motivations of the illegal mining entrepreneurs. There are also concerns about the safe handling of mining equipment such as detonators that can be dangerous and deadly if not handled with care. The fact that the South African Police Service recovered hundreds of these in the province in 2021, for example, shows how dangerous illegal mining is, even to the miners themselves (South African Police Service, 2022). In terms of the demographics of miners, the abeyance of mining regulations by illegal miners also shows that child labour, forced and or cheap labour has been linked to their activities in the province (Portfolio Committees on Mineral Resources and Energy, Home Affairs, and Police on the Joint Oversight Visit on Illegal Mining to Five South African Provinces, 2022).

#### - ***Environmental Effects of Illegal Mining in North West Province***

The environmental outcomes of illegal mining in North West Province are as dire as the economic and social effects. This is because mining is an environmentally relevant activity, hence, efforts are usually made to ensure that it is done in an environmentally responsible manner. This is why official mining activities cannot commence without a viable Environmental Impact Assessment which details the mitigative steps to be taken to assuage the possible negative environmental effects of mining activities (Laisani, Choma & Magoro, 2022).

Illegal mining is happening in North West Province in abeyance of the foregoing which is causing serious environmental issues. This includes water pollution because illegal mining does not take the environmental rights and needs of communities into consideration. Because of this, many metals and other impurities enter into groundwater, thereby putting people living in mining areas at risk. Renee Street of the South African Medical Council asserts that “mining may contain potentially harmful metals such as arsenic lead, cadmium, uranium, and mercury. It may also acids, minerals, and sulfides. If not managed properly, mining waste can have adverse effects on humans and the environment” (Hendricks, 2023). As a result, the carelessness that pervades illegal mining allows these metals to contaminate water and make it unsafe to drink for humans and animals and even other economic concerns.

Contaminated water caused by illegal mining can affect the health of the people. In the case of Orkney, near Klerksdorp, the long-term effects of mining on the quality of water have been a serious topic in recent times. According to residents of the mining town, the contamination from gold mining over the years predisposes them to health hazards. A resident of the two avers that;

*“The water doesn’t have a normal water taste. As communities, we might get lots of diseases, because sometimes when you open a tap for water, the water has mud. As the water passes through mine pipelines, mines use dangerous chemicals and we might get diseases”* (Hendricks, 2023).

Illegal mining is exacerbating this challenge in the North West Province including surface water pollution, especially in rural mining communities which depend on such sources of water for their day-to-day living and livelihoods. In the same vein, the Portfolio Committees on Mineral Resources and Energy, Home Affairs, and Police on the Joint Oversight Visit on Illegal Mining to Five South African Provinces (2022) note that gases emanating from abandoned, unrehabilitated mines and illegal mines predispose residents of mining communities to health challenges such as respiratory illnesses.

Illegal mining speaks to many issues that border on the socioeconomic development of the North West Province. The historical politics of access to mineral resources based on racial relations and cheap foreign labour and the weakening of other sectors of the provincial economy relative to mining are major at the heart of illegal mining and its many effects in the province. As a province bedeviled with a litany of socioeconomic challenges arising from illegal mining, it is difficult for it to attain its full development potential through mining and other sectors. The province has found itself in cul de sac regarding illegal mining because of its historical inequalities and lack of economic opportunities are critical drivers of the menace. While there are many laws and policies on mining that help to combat illegal mining, the foundational issues of historical inequalities and economic opportunities, especially in the rural mining communities have made the implementation tenuous. Hence, the province continues to grapple with many socioeconomic challenges that are stifling its development.



## 5. Conclusion

Illegal mining has become an endemic and dangerous economic activity in North West Province, South Africa. The province is well endowed with many mineral resources and its economy is anchored on the mining of these resources. The nature of its mining industry-based economy is brought to light with the realisation that four of the world's largest platinum mines are located in the North West Province (Mining Technology, 2024). Its profile in other mineral resources such as gold, chrome, diamond, and other resources remains impressive. However, resource abundance has introduced illegal mining of the different mineral resources in the province. This has produced several effects bordering on economic, social, and environmental aspects of the socioeconomic development of North West Province. The economic effects of illegal mining on the socioeconomic development of the province include loss of revenue to the government, infrastructure damage and theft, weakening of critical sectors of the provincial economy leading to high unemployment and poverty, and organised economic crimes, including money laundering and financing of criminal activities. Socially, illegal mining affects the socioeconomic development of the province through crimes and insecurity, social disharmony, indolence and opportunism, and poor workers' safety and labour challenges. Lastly, the environmental effects of illegal mining on North West Province's socioeconomic development include air and water pollution and their consequent health challenges in society.

These are not just problems in themselves, they are a function of the political and economic structure that historical racial challenges have foisted on the South African society. These challenges produced a lack of economic opportunities for the vast majority of South Africans and one of the effects of this is illegal mining. While the preponderance of illegal migrants in illegal mining in the province and South Africa is taken note of, it must be noted that they are merely taking advantage of the foundational political and economic drivers of the illegal mining in the province. The political ecology of mining in North West Province demonstrates the unwillingness of the political and economic structure of South Africa to allow for artisanal mining that could help regularise many of the illegal miners, thereby allowing them to contribute meaningfully to the economy (Thorton, 2014). This reality is also helped by the low industrial profile of the province such that there is a high youth unemployment rate which produces poverty and encourages people to engage in illicit economic engagement such as illegal mining. Hence, the many issues that are affecting the province's socioeconomic development. In the case of the province, the effects of illegal mining are apparent in the economic, social, and environmental tripod of socioeconomic development, which means that illegal mining portends an absolute disaster to its development.

The solutions to illegal mining in North West Province are multifaceted. This includes the need to strengthen existing and develop new mining and environmental laws and policies in the province and South Africa to cover legal and policy gaps enabling illegal mining. This includes the legal recognition of artisanal mining as an antidote to illegal mining in North West Province and South Africa at large. This will help to address historical injustices and misgivings about access to and use of mineral resource riches of the country. Given the conflicting roles of the government and traditional institutions in illegal mining, there is a need for clarity on this in the mining and land policy of the province and the country. There is also the need for more community engagement across the province to make communities and their traditional leadership buy into the anti-illegal mining campaign of the government. With the high number of abandoned mines in the province, it will be difficult to combat illegal mining. Hence, there is a need for the restoration of these mines to ensure that the opportunity for illicit resource mining is upended. North West Province needs to champion sustainable mining practices that would prevent the current situation of abandoned mines in the future and ensure also ensure environmental sustainability within it. This multi-faceted approach will help to restore mining normalcy in the province and ensure it benefits maximally from its resource abundance.

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