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EQUITABLE ACCESS TO MINERAL RESOURCES IN THE SOUTH AFRICAN MPRDA: THE CASE OF ARTISANAL AND SMALL SCALE MINING

Submitted in partial fulfilment of the requirements for the degree of

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DECLARATION

I, TATENDA WAYNE MUPONDE,

Declare that this Research Report is my own unaided work. It is submitted in partial fulfillment of the requirements for the degree of Master of Laws (by Coursework and Research Report) at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.
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ABSTRACT

Artisanal and Small Scale Mining (ASM) is a growing sector in the South African mining industry and yet it remains highly unregulated. The main mining regulatory tool in South Africa is the Minerals and Petroleum Resources Development Act (MPRDA) which has the promotion of equitable access to mineral resources as one of its main objectives. However, despite the objectives of the MPRDA, a lack of formal access into the mining industry plagues the ASM sector and still remains as one of the impediments to the growth of the sector. The lack of a proper regulation that provides for equitable access to mineral resources in the MPRDA creates a gap in our mining laws that can easily be exploited by ASM miners through informal mining.

This paper argues that it is imperative for South African mineral law to include ASM miners and grant them proper access to minerals as this will be consistent with our Constitutional values of equality. It further argues that the inclusion of ASM into the regulatory framework will allow for greater accountability of the ASM sector especially in terms of its negative environmental footprint. Therefore, the paper seeks the inclusion of ASM into the South African mineral law regulatory framework through an amendment of the MPRDA by including a chapter specifically dealing with ASM. It is argued that the inclusion of ASM will not only be in line with the Constitutional values of equality but will also help in facilitating the advancement of the Constitutional environment right.

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INTRODUCTION

Artisanal and small scale mining (ASM) is a growing sector in the mining industry of South Africa. It is currently not sufficiently regulated in our mining laws despite the fact that it has a significant detrimental impact on the environment. One of the main causes of ASM as well as an impediment to the growth of the sector is a lack of formal access to mineral resources. Mining in South Africa is mainly regulated by the Minerals and Petroleum Resources Development Act[1] (MPRDA) which has the promotion of equitable access to mineral resources as one of its main objectives and yet ASM somehow seems to fall outside its ambit for access to minerals. Even if we are to say that such access is implicit in its provisions, the conditions of such access are too strenuous for these artisans to join the formal sector. ASM usually involves people from poor backgrounds who may not necessarily have the financial or technical resources required to meet the requirements for access to minerals in the formal mining sector. Therefore, this lack of a proper regulatory framework that provides equitable access to mineral resources to ASM creates a gap in our law that can easily be exploited by most artisans through informal or rather illegal mining and is detrimental to the environment. Hence, there is a need to address this gap in our law and grant equitable access to ASM miners as this will not only be in line with the notion of equality enshrined in our Constitution[2] but will also lead to the mitigation of the environmental damage caused by ASM.

WHAT IS ARTISANAL AND SMALL-SCALE MINING?

South Africa has been involved in mining, both on a small scale and large scale, for a very long time. However, the history of South African mining mainly focuses on large-scale mining (LSM) despite the fact that ASM activities have been taking place for a much longer period than LSM.[3] Thus, "ASM is not a new activity in South Africa but was largely ignored by the apartheid regime and only became a part of the national agenda after the change in government after 1994."[4] This was so because most people who were involved in ASM activities formed part of the group of those who were historically disadvantaged due to apartheid discriminatory laws. These people were dispossessed of their land and therefore could not own any land rights or mineral rights for that matter. Therefore, with the dawn of democracy and a new Constitutional dispensation, "ASM sector in South Africa was first recognised in 1994 as a

[1] Act 28 of 2002.
[2] Constitution of the Republic of South Africa, 1996 see section 9.
[3] Ledwaba P.F "The Status of Artisanal and Small-Scale Mining In South Africa: Tracking Progress" (2017)117 *The Journal of the Southern African Institute of Mining and Metallurgy* 33 at 34.
[4] Ibid.

vehicle to foster social and economic growth through the participation of historically disadvantaged South Africans in the mining industry."[5]

ASM featured as one of the key social and economic programmes in the ANC Reconstruction and Development Programme[6] which was aimed at eradicating past injustices in South Africa. The "ASM sector was earmarked to redress imbalances of ownership created by the apartheid regime in the mining industry through the empowerment of disadvantaged communities, the provision of skills, the stimulation of entrepreneurial spirit in South Africa and better utilization of mineral resources."[7] Thus, the development of the sector was seen to be a form of an affirmative measure to redress past injustices in the society and economy at large by empowering disadvantaged communities through the provision of skills that will lead to better utilization of mineral resources in the nation.

In addition, the Minerals and Mining policy of South Africa[8] dedicated a whole chapter on small-scale mining where it emphasised on the importance of developing that sector. The policy was centred on three pillars which were related to "the development of the ASM sector, encouraging participation of disadvantaged communities and addressing challenges in the sector."[9] This indicated its aim to further the ASM agenda as the development of the sector was seen to be a way of providing a channel for increased access to the mining industry to all persons. Therefore, the main government objective in the policy with regards to small-scale mining was to "encourage and facilitate the sustainable development of small-scale mining in order to ensure the optimal exploitation of small mineral deposits and to enable this sector to make a positive contribution to the national, provincial and local economy."[10] This was all done in order to solve some of the challenges faced by the ASM sector in South Africa such as access to mineral rights, limited financial support and difficulties with the regulatory and administrative requirements of the mining sector.

Generally, the ASM industry in South Africa is growing with an estimated number of between 10 000 and 30 000 people participating in such activities.[11] However, a proper census has not

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[5] Ibid at 33; also see, Ledwaba P & Nhlengetwa K "When Policy Is Not Enough: Prospects and Challenges of Artisanal and Small Scale Mining in South Africa" (2015) 7(1) *Journal of Sustainable Development. Law and Policy 25* at 26.
[6] Reconstruction and Development Programme (RDP), 1994.
[7] Op cit note 3.
[8] *A Minerals and Mining Policy for South Africa* (White Paper), October 1998.
[9] Ledwaba Op cit note 3.
[10] Ibid at 25.
[11] Op cit note 3.

been undertaken to establish the exact number of people participating in the sector and therefore the above figures may not be a true reflection of the sector.[12] In South Africa, most ASM activities take place in rural areas that are rich in minerals and, "as in many countries, the biggest motivations to participate in ASM activities are the high unemployment rates and high levels of poverty."[13] Thus, ASM is mostly done for the subsistence of the livelihoods of those people hence its link to the economy and poverty alleviation. It is important to note that ASM largely occurs at an informal level in South Africa as most of its participants operate outside of the legal framework. What is more interesting in South Africa is the escalation of ASM activities despite government's attempts to bring them within the regulatory framework through the creation of a mining permit for small-scale mining. According to Ledwaba, "in the majority of areas, aspiring and existing miners are aware of the legal requirements and the processes for obtaining legal permission but it is however costly for most of them to do so."[14]

Nevertheless, the above issue is not necessarily applicable to all people in the ASM sector as it can be divided into different categories of miners therefore the constraints of one category are not necessarily the same for all. A definition of ASM is therefore required in order to establish its various actors and what it consists of. The definition of small-scale mining has been much debated and to date, there has not been a single satisfactory definition of it. The International Labour Organisation (ILO) and the Intermediate Technology Development Group (ITDG) perspectives on small scale mining has been that "small scale miners are poor people, individuals or small groups who are dependent upon mining for a living, use rudimentary tools and techniques to exploit their mineral deposits."[15] Thus, both organisations view small scale mining as an activity undertaken by poor people using simple tools to extract minerals for their own subsistence. On the other hand, according to the Centre for Sustainability in Mining and Industry (CSMI), ASM is viewed differently by different countries however, the "common parameters used by various African countries to define ASM include the level of employment, annual production output, capital investment, level of mechanisation and size of

[12] Hilson G & Potter C "How Has a Shortage of Census and Geological Information Impeded the Regularization of Artisanal and Small Scale Mining?" (2004) 28 *Natural Resources Forum* 22.
[13] Op cit note 12; Also see Hosken G 'We Know It's Dangerous but the Money is Good- South Africa's Illegal Mining Explosion' available at https://www.timeslive.co.za/news/south-africa/2017-05-21-watch-we-know-its-dangerous-but-the-money-is-good-south-africas-illegal-mining-explosion/ last accessed 27/11/2018.
[14] Op cite note 3 at 35.
[15] Dreschler B "Small Scale Mining and Sustainable Development within the SADC Region"- Mining Minerals and Sustainable Development Report No84 (2001) available at https://www.commdev.org/wp...small-scale-mining-development-SADC-Region.pdf at 20.

mining operations."[16] The distinction between the ILO perspective on ASM and the view taken by various African countries is striking in the sense that while the ILO views ASM as an activity commonly undertaken by poor people for subsistence, the common African perspective on ASM places emphasis on small commercial mining with no reference to poverty. This goes to show why there has not been a single satisfactory definition of ASM as different blocks view it differently with the only common feature being the fact that it occurs on a smaller scale and there is use of rudimentary tools or low mechanisation levels.

In South Africa, the official definition that is used to define ASM was adapted from the National Small Business Act[17] where it is defined as "a mining activity employing less than 50 people and has an annual turnover of less than R10 million with fixed and moveable assets of less than R15 million."[18] Thus, ASM is defined in accordance to the number of people employed and its capital investment. This definition is in line with the South African Minerals and Mining Policy which states that "although there is no agreed definition of small scale mining, it is often defined with regard to a mine's output, capital investment, number of people employed or managerial structure."[19] This shows that small-scale mining is easily identifiable through its common characteristics and the nature of the activities being undertaken rather than through the existence of a common definition of what the activity actually is.

However, although the above definitions have been broadly accepted, they fail to capture the different nuances and complexities of ASM. In South Africa, "small scale mining ranges from very small operations that provide for subsistence mining, to the 'junior' companies for which revenue is such that subsistence living is not the prime motivator."[20] Thus, it is not only undertaken by small groups of people or individuals, often from poor backgrounds, mining for their own subsistence but also encompasses small commercial mining. Hence, it is not entirely a poverty driven sector as some participants are doing it for reasons beyond mere subsistence living.

From the above, it can be deduced that there are three different categories of small-scale mining. The first consists of small scale miners who operate within the regulatory framework

[16] Ledwaba P & Mutemeri N "Preliminary Study on Artisanal and Small-scale Mining in South Africa" – Report prepared for Open Society Foundation of South Africa by the Centre for Sustainability in Mining and Industry (2017) available at www.osf.org.za/wp-content/uploads/2018/05/OFS-SA-Report-ASM-03NOV-WEB-Open-Society-Foundation-for-South-Africa-OSF-SA-Publications.pdf at 3-5; also see Ibid..
[17] Act 102 of 1996.
[18] Ibid.
[19] Op cit note 8 at 24; also see Ledwaba Op cit note 3 at 27.
[20] Ibid.

usually for entrepreneurial purposes. The second, consists of small operations that operate informally in the sense that, they do not have the necessary authorizations to operate either because the conditions of entry into the industry are too strenuous for them, they are unaware of the need to get operating licences or due to a blatant disregard of the law. This group consists of individuals or small groups of people operating outside the mining regulatory framework for commercial purposes. The third group of small-scale miners consists of the artisanal miners and this involves the extraction of minerals on a small scale using the simplest of tools such as panners or other manual or portable equipment and is done on a subsistence level.[21] Artisanal mining often involves the zama zama type of mining which consists of "a group of miners who operate outside the legal framework but their activities are often associated with criminality and organised crime. These miners operate in abandoned shafts."[22] Although both the second group and third group are illegal miners, their motives for entering the mining industry are different as the former operates for profit whilst the latter group operates mainly for their subsistence.

The purpose of this section was to define ASM and what it consists of. It is clear from the above that there are three identifiable categories of ASM however for the purposes of this research paper I will focus mainly on the second and third group of ASM miners. This is so because lack of proper access to mineral resources is one of the main reasons why they operate outside of the regulatory framework. Thus, their exclusion from the regulatory framework forces these two groups to find other ways to enter the mining industry. An analysis of the South African mineral regulatory framework and its standpoint on access to minerals is therefore important.

MINERAL REGULATION IN SOUTH AFRICA AND THE ISSUE OF ACCESS TO MINERAL RESOURCES

This section seeks to analyse the South African mineral regulatory framework and the issue of access to minerals. South African mineral law was based on the Roman-Dutch Law principle of the cuius est solum eius et usque ad coelom et ad inferos which means that the owner of the land owned everything above and beyond it. This meant that the landowner was not only the owner of the surface land but also owned any minerals beneath it.[23] This essentially meant that one could only own minerals if they owned land. Thus, "ownership of minerals was in the

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[21] Ledwaba op cit note 3 at 24; also see Op cit note 15.
[22] Op cit note 13.
[23] Van Der Schyff E "South African Mineral Law: A Historical Overview of the State's Regulatory Power Regarding the Exploitation of Minerals" (2012) 64 *New Contree* 131 at 133.

hands of landowners and those to whom they had transferred rights and the state enjoyed the power to authorise mining operations and the disposal of minerals owned by private persons."[24] This shows that while mineral ownership was in the hands of private landowners, the transfer of such rights could be done by way of a private agreement between a landowner and a third party. Also, it is evident that while the state's powers in terms of mineral ownership were limited where the land was under private ownership, the state still had some form of control in terms of the mining for and disposal of minerals. Ultimately, this common law principle of mineral ownership prevented access to the exploitation of minerals to those who could not be landowners or could not conclude any transfer agreements with the landowners.

The common law principle of mineral ownership was manifested in early South African mineral law legislation. For centuries, legislation that regulated access to and exploitation of mineral resources favoured those who were landowners.[25] For instance, the South African Minerals Act,[26] which is the predecessor of the MPRDA, was not only a product of the apartheid regime, but was also based on this underlying common law principle of mineral ownership. In terms of the Minerals Act, "the holder of a mineral right was the landowner and being a right holder was critical to obtaining a prospecting permit in terms of section 6(1) or a mining authorisation under section 9(1) of the Act."[27] This essentially meant that it was of significant importance for one to own land in order for them to get access to mineral exploitation. However, mineral rights could be transferred to third parties by means of an agreement such as a cession or a lease.[28] That is, the granting of a prospecting permit or a mining authorisation in terms of the Minerals Act was only open to persons who were right holders or those who had acquired written consent to prospect or mine from the right holders.

This inextricable link between mineral ownership and the exploitation of minerals in South Africa is what essentially perpetuated the exclusion of black people from accessing minerals and participating in the mining industry. Statutes regulating access to and exploitation of mineral resources were exclusive on a racial basis and discriminatory. The Natives Land Act[29] expressly prohibited Africans from purchasing land from certain designated areas and the

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[24] *Minister of Mineral Resources and Others v Sishen Iron Ore Company (Pty) Ltd and Another* 2014 (2) SA 603 (CC) para 5.

[25] Mutemeri N & Petersen F. W "Small Scale Mining in South Africa: Past, Present and Future" (2002) 26 *NATURAL RESOURCES FORUM* 286; also see Hinton J "Clean Artisanal Gold Mining: A Utopian Approach?" (2003)11 *Journal of Cleaner Production* 99 at 100-101.

[26] Act 50 of 1991.

[27] Ibid at *s1 (ix).*

[28] Ibid.

[29] 27 of 1913.

Mines and Works Amendment Act[30] legalised racial segregation in the mining industry and reserved certain jobs for white employees. Ngcukaitobi's work demonstrates how Africans were dispossessed of their land by early European settlers and compelled to become labourers on farms and mines.[31] Thus, Black people were dispossessed of their land and therefore could not be landowners as they were now regarded as labourers. This explicit racial segregation in South Africa therefore negatively affected the participation of Black people in the mining industry. Statutes such as the Minerals Act stipulated that mineral rights could only be held by landowners therefore, this effectively excluded black people from holding any mineral rights. "Consistent with the policy of not recognising mineral rights held by black people, the authorities ignored the rights held under indigenous law."[32] For example, the Nama people from Namaqualand had been mining for ages when they got dispossessed of their land to which they were indigenous to. They were effectively denied of their rights to mine minerals on their land even though they had been doing so before its annexation.[33] This shows the extent of the discriminatory laws as they did not just affect black people, but also people who were indigenous to certain areas and had been dependent upon mining for their livelihood for centuries.

However, with the dawn of a new constitutional dispensation in 1994, all the inequalities and imbalances caused by the apartheid regime and racist colonial laws were sought to be eradicated. "The Constitution not only rejected the racist policies of the past, but it also imposed obligations on the democratic government to take legislative and other measures to address the inequalities caused by racist colonial laws and apartheid laws."[34] Thus, to address the gross inequalities of the past, legislative measures had to be taken to facilitate equality and equitable access to minerals and opportunities especially in the mining industry. Therefore, legislative intervention was necessary in the mining industry and this came in the form of the MPRDA. The MPRDA was passed by parliament in part, "to eradicate all forms of discrimination practices in the mining and petroleum industries and also to redress the inequalities of past racial discrimination."[35] Thus, the MPRDA is a transformative tool which seeks to eradicate

30 25 of 1926.
31 Tembeka Ngcukaitobi *The Land is Ours: South Africa's First Black Lawyers and The Birth of Constitutionalism* (2018) 237; 272.
32 Op cit note 24 para 6.
33 Ibid.
34 Ibid para 9; also see Op cit note 2 at *s 9(2).*
35 Op cit note 24 para 13; also see Op cit note 1 Preamble.

past imbalances in the mining industry by opening up the industry to everyone in the nation.[36] The MPRDA therefore has at its heart, an aim to facilitate equitable access and sustainable development of the nation's mineral and petroleum resources.[37] This will be done mainly by "eradicating all forms of discriminatory practices in the mining industry and putting in place measures that will address the effects of skewed distribution of economic benefits which took place during the apartheid era and the creation of a mining regime that is internationally competitive and efficient."[38]

The first pivotal step taken by the MPRDA in achieving the above objectives was to place all mineral resources wholly in the hands of the nation and making the state the custodian thereof. This is a very fundamental change that was brought in by the MPRDA as this effectively abolished the doctrine of private ownership of mineral rights by vesting ownership in the nation and making the state the custodian thereof. "To a large degree, the abolition of private ownership of minerals has levelled the playing field in the context of applying for prospecting and mining authorisations."[39] This means that with the MPRDA in place people can now apply for mining rights even when they do not own the land under which the minerals exist. Hence, those who were previously denied of access to land ownership and minerals can now participate in the mining industry by simply applying for the necessary authorisations required by the MPRDA for the exploitation of minerals. Nevertheless, despite the changes brought by the MPRDA and what it seeks to achieve, the real question of whether or not the MPRDA actually grants equitable access to mineral resources still remains.

Generally, it has been argued that the MPRDA is failing to effectively meet its own objectives. "While the MPRDA contains laudable goals for transforming the mining industry, protecting, managing and rehabilitating the environment, there appears to be a stark contrast between overarching legislated ideals and mining practice."[40] Thus, the implementation of the MPRDA and its objectives are always in tangent with one another. For example, the Act fails to properly implement and achieve the environmental ideals enshrined in South African national laws especially with regards to biodiversity protection in the mining cycle.[41] Also, certain

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[36] Cawood F.T "The Mineral and Petroleum Resources Development Act of 2002: A Paradigm Shift in Mineral Policy in South Africa" (2004) 104:1 *Journal of Southern African Institute of Mining & Metallurgy* 53.
[37] Op cit note 1 at *s2(C);* also see *Agri South Africa v Minister of Minerals and Energy* 2013 (4) SA 1 (CC) para 26.
[38] Ibid.
[39] Op cit note 24 para 16.
[40] Mclean J & Carrick P "Environmental Management and Rehabilitation under the Minerals and Petroleum Resources Development Act: A Biodiversity Outlook" (2007)14(2) *SAJELP* 187 at 189.
[41] Ibid at 187-188.

fundamental problems and gaps in the legislation make it difficult for the state to facilitate effective participation in the mining industry thus hindering its transformation.[42] However, despite the fact that the MPRDA is failing to achieve most of its objectives in terms of transformation and providing access into the mining industry, this research paper does not seek to discuss these failures in their broad context. The paper seeks to analyse how the failure of the MPRDA to include ASM in its ambit creates a gap in our law that is not only impeding on the Constitutional imperative of equality but also poses an unaccounted for threat to the environment.

THE MPRDA AND THE IMPORTANCE OF GRANTING EQUITABLE ACCESS TO MINERAL RESOURCES TO THE ASM SECTOR

This section seeks to discuss the meaning of equitable access in the MPRDA and why then it will be important to grant such access to the ASM sector both from an equality and environmental protection perspective.

The equality argument:

The Constitution has a purpose to "eradicate past discrimination and injustices suffered by a group of people on the basis of race, class, ethnic or social origin and it does this by providing for the protection of equal rights and freedoms for all people in South Africa."[43] In Soobramoney, the court noted that the discriminative nature of the provision of resources during the apartheid era has caused a great difference of wealth in South Africa with millions of people living in abject poverty.[44] The right to equality is therefore one of the most important rights recognised by the Constitution[45] as it will not only lead to the inclusion of excluded groups of people such as ASM miners, but will also help to address inequalities by restructuring the conditions which created the disadvantages in the first place. Section 9 of the Constitution establishes a notion of substantive equality as the main objective of transformation in South Africa. That is, "it demands the empowerment of vulnerable and disadvantaged people who suffered from past discrimination through different measures of affirmative action to redress past injustices."[46] This approach to equality involves "an inspection of inequality in light of a group's context and social and economic conditions that shapes the group's status and then

[42] Mkhize M "Failing the Objectives of the MPRDA" (2014) *De Rebus* 58.
[43] Supra note 2 at section 9; also see Pieterse M "What Do We Mean When We Talk about Transformative Constitutionalism?" (2005) 20 *SAPL* at 158.
[44] *Soobramoney v Ministry of Health, Kwazulu-Natal* 1998 (1) SA 765 (CC).
[45] *Bhe v Magistrate, Khayelitsha and Others* 2005(1) SA 580 (CC) para 17.
[46] Marta Teshome "Transformative Constitutionalism in South Africa" available at https://www.researchgate.net/publication/260460449_Transformative_Constitutionalism_in_South_Africa.

strives to dismantle the entrenched disadvantage on the basis of new norms and rules which have not been used to discriminate the group."[47] Thus, it strives to achieve equal access to resources and opportunities through remedial measures specifically aimed at uplifting a particular group of people which suffered from past discrimination.

Although the notion of equitable access is concerned with fairness and being reasonable in a way that ensures that people get access to the same opportunities,[48] in the South African context it goes beyond the mere acceptance that a certain group of people is excluded and then formally including them in the system without correcting the structures or conditions that led to such an exclusion. In South Africa, and bearing in mind the history of mineral exploitation in the country, the notion of equitable access goes far beyond the mere treatment of people in a fair manner. Equitable access to mineral resources involves the development of policies that address all social and economic imbalances in a nation so that people from diverse backgrounds have an opportunity to access those minerals. Thus, it is more about eradicating any inequalities that may act as an impediment to the access of minerals by all people. However, it should take into account the fact that in order to achieve equality of outcome ultimately we might need to ensure that opportunities are not exactly the same but skewed in favour of those who are marginalised in order to level the playing field. Hence, equitable access in the MPRDA has to be viewed against the history of mineral law in South Africa and the Constitutional objective of substantive equality.

The notion of substantive equality requires "due consideration of the actual social and economic conditions which cause difference and inequality between individuals and groups."[49] Thus, in the context of the mining industry, substantive equality would require that there be an active and effective eradication of the social and economic obstacles to equality in the sector. Most of the people involved in ASM are a part of the groups of people that suffered from the injustices and imbalances of the past. They were dispossessed of their land and therefore could not access minerals in their own right. Also, the ASM sector did not have a significant role in the mining industry in the past. Therefore, considering that the MPRDA claims to be a transformative tool that aims to eradicate the injustices of the past, it is crucial for the ASM sector to be included in its legislative ambit.

[47] Ibid; also see Pieterse Op cit note 43.
[48] Ronald Eglin A Learning Brief on "Equitable Access to Land" 2017 at 4.
[49] Van Reenen T.P "Equality, Discrimination and Affirmative Action: An Analysis of Section 9 of the Constitution of the Republic of South Africa" (1997)12 *SAPR/PL* 151 at 153.

In addition, the Constitution emphasises on the need to "heal the divisions of the past and establish a society based on democratic values, social justice and fundamental human rights."[50] Considering that ASM miners were previously excluded or rather ignored in the past, including them in the post-democratic policies is a step towards creating a society envisaged by the Constitution. Hence why the government was urged to "consider ways and means to encourage small-scale mining and to enhance opportunities for participation by our people through support including financial and technical aid and access to mineral rights."[51] This will help in developing the sector by bringing them into the mainstream economy as well as poverty alleviation especially in the rural areas were ASM usually takes place. The MPRDA, as a transformative tool, clearly states in its objectives the need to "promote equitable access to minerals to all the people of South Africa and to substantially expand the opportunities for all historically disadvantaged persons to enter the mineral industries and to benefit from the exploitation of the nation's mineral resources."[52] This shows its commitment to eradicating past injustices and opening up the mining industry to all persons and yet, in effect, it is failing to do so.

As mentioned earlier, the state is the custodian of mineral resources in South Africa and therefore anyone who wants access to minerals has to make an application to the state for exploitation rights. In terms of ASM, the MPRDA has made some attempts to formalise the sector through the inclusion of a mining permit in the Act.[53] The mining permit is intended for small scale miners and is granted where the mining area in question does not exceed 5 hectares and for a period not longer than 2 years.[54] "Prior to the MPRDA, the majority of South Africans did not have access to mineral rights and this was seen as a major block to the development of small scale mining which was identified as a vehicle for the creation of jobs, a channel for increased access to the mining industry, and an opportunity to optimally exploit resources that large scale miners are unable to operate profitably."[55] This suggests that including small scale mining in the mineral law legislative framework is considered to lead to an increase in the access of mineral resources as it will not only be granted to LSM but opportunities will also be made available to those who can optimally mine at a smaller scale. Also, not all mineral

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[50] Op cit note 1.
[51] Ledwaba Op cit note 3 at 34; also see Op cit note 6.
[52] Supra note 1 at *s2(c); s 2(d).*
[53] Op cit note 1 at *s27*.
[54] Ibid; also, Minerals and Petroleum Resources Development Amended Act 49, 2008 at *s23*.
[55] Debrah A.A, Watson I & Quansah D.P.O "Comparison between Artisanal and Small Scale Mining in Ghana and South Africa: Lessons Learnt and Ways Forward" (2014) 114 *The Journal Of The Southern African Institute Of Mining And Metallurgy* 913 at 917.

deposits are suitable for large scale mining and therefore it would only make sense if such deposits were exploited at a smaller scale as this might be more profitable. Thus, mining permits for small scale mining are the means used by the MPRDA to provide access to minerals to small scale miners.

However, the requirements for obtaining a mining permit in the MPRDA are quite onerous on ASM miners.[56] This is so because "mining permit holders have to meet the same requirements as those for large scale mining namely reporting, monitoring and performance assessment requirements, the requirement to make financial provision for environmental remediation and the need to make financial provision for and obtain closure."[57] Also, the application for a mining permit has to be accompanied by an environmental management plan (EMP)[58] and ASM miners still need to comply with the National Environmental Management Act[59] (NEMA) especially where they are likely to trigger a basic assessment or a full environmental impact assessment (EIA).[60] The applicant is required to demonstrate in their EMP that "they have the financial means and has made sufficient and acceptable pecuniary financial provision for the remediation of environmental damage or management of environmental damage before the approval of the EMP."[61] This poses a financial and technical burden on ASM miners as the process of obtaining and EMP and EIA requires technical expertise they might not be able to afford. This shows that, although small scale mining occurs at a smaller scale and over a short period of time, it is still regulated as if it were LSM in South Africa. However, this is in line with the Minerals and Mining Policy[62] which stressed that all forms of mining should be subject to the same requirements in relation to licensing, health, safety and environment. Nevertheless, these requirements are quite strenuous on ASM especially considering the financial burden

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[56] Ledwaba Op cit note 4; also see Mutemeri N, Sellick N and Mtega H A Report on "What Is the Status of Small-Scale Mining In South Africa?" discussion document for the MQA SSM COLLOQUIUM, August 2010.
[57] Op cit note 55 at 917; also see Ledwaba Supra note 3 at 38 and 41.
[58] Supra note 54 at *s23*; An EMP can be defined as "an environmental management tool used to ensure that undue or reasonably avoidable adverse impacts of the construction, operation and decommissioning of a project are prevented; and that the positive benefits of the projects are enhanced" see Lochner P 2005. Guideline for Environmental Management Plans. CSIR Report No ENV-S-C 2005-053 H Provincial Government of the Western Cape, Department of Environmental Affairs and Development Planning Cape Town available at https://www.westerncape.gov.za/text/2005/7/deadp_emp_guideline_june05_5.pdf.
[59] Act 107, 1998 at *s24*.
[60] An EIA is "a tool used in environmental management and planning which assists decision-makers on whether or not a proposed project should be approved after assessing the full extent of its environmental impacts" see ibid and also Jay Stephen et al "Environmental Impact Assessment: Retrospect and Prospect" *Environmental Impact Assessment Review* 27(2007) 287 at 287-288.
[61] Section 39, MPRDA and Reg 52, MPRDA; also see The Department of Water Affairs and Forestry, 2006. Best Practice Guidelines: A1.1 Small-scale Mining- User Format available at www.mineralscouncil.org.za/work/.../26.../364-a/-/-small-scale-mining-user-format at 4-7.
[62] Op cit note 8.

they have to incur to obtain a permit and the skills and capacity that will be required to operate in the industry.

The strenuous requirements of entry into the industry and the complimentary financial burden involved in gaining access to the industry promotes discrimination in the sector rather than avoid it. Mineral resources can only be accessed by those who have the necessary skills and means to undertake mining activities and not everyone. This creates a form of exclusion based on the financial ability of a person in a supposedly democratic country were all forms of discrimination are deemed to be prohibited. The role players in ASM mostly consists of previously disadvantaged people most of which are mining for their own subsistence therefore cannot afford to meet the hefty financial requirements or other strenuous conditions of entry into the ASM sector. For example, not all artisans will be able to provide financial provisioning for remedying their environmental impacts as required by the NEMA[63] and yet it is still required for them to get a permit. This therefore comes across as some form of institutional discrimination based on class and differences and might be an unintended consequence of the exclusion of ASM by the MPRDA.

Thus, whereas these conditions set in the MPRDA for the formal entry into the mining sector for small scale mining were meant to promote access to the mining industry, they are actually a severe impediment to such access. Mining is generally a capital intensive and environmentally invasive activity and it makes sense why the conditions for entry into the industry have to be so onerous. However, those same conditions are impeding access to the sector for small scale mining and most small scale miners, especially the artisanal miners, are now resorting to informal and illegal mining activities because of such legislative constraints that are withholding them from formal access into the sector. Hence, the MPRDA creates a situation whereby the people it tries to grant access to minerals on paper cannot, in reality, actually access the mineral resources.

This is so because the MPRDA takes on a formal approach to equality where it accords the same rights to everyone by using the same and non-preferential norm or standards in granting mining rights. Thus, it ignores the social and economic disparities between people in the society who might be interested in mining and therefore tends to actually reinforce inequalities instead of eliminating them. In this regard equity requires that mining permits be granted in accordance with the socio-economic realities of the particular applicant. Access to mining opportunities

[63] Supra note 59.

has to be skewed in favour of those whose socio-economic circumstances would not permit them to meet the strenuous requirements of entry. One of the objects of the Mining Charter is to "substantially and meaningfully expand the opportunities of historically disadvantaged people to enter into the mining industry and benefit from mineral resources exploitation."[64] That is, it aims to facilitate the socio-economic empowerment of previously disadvantaged people through granting them access into the mining industry. However, it is difficult to achieve such empowerment when the primary piece of legislation aimed at facilitating access into the mining industry fails to take into account socio-economic circumstances of prospective mining permits applicants. Hence, the failure of the MPRDA to facilitate the inclusion of ASM into the mining industry is not only an infringement on its own objectives but encroaches on a constitutional imperative of equality. As ASM was a formally excluded sector in the mining industry, it is crucial for the sector to be granted equitable access into the mining industry. This will not only align with the objectives of the MPRDA to bring about equitable access to mineral resources, but will also fulfil a constitutional mandate of equality.

Furthermore, the size extent and the total duration for the mining permits is also a factor that hinders access to the sector. The permit is only granted for a two year period with only three renewals allowed for each year after that.[65] This duration is neither profitable nor sustainable from an investment point of view. It promotes extraction of minerals at a much faster rate as miners would want to get as much as possible from the land as well as a good return on investment before the permit expires and becomes non-renewable. This is possibly an unintended consequence of ASM regulation under the MPRDA but it contributes to unacceptable dangerous mining methods in a rush to extract more before the permit expires. Also, it is possible that the mineral deposit could still be viable after the duration of the permit and one begins to wonder if an investor would just walk away from such a deposit simply because they have exhausted authorisation conditions. Such limitations on the life of a small scale mine make it easier for people to opt for informal mining instead of entering into the formal regulatory framework. This is so because they can mine for much longer and get a good return on profit if they conduct the activities informally as the formal route only provides limited access to the mineral resources and is not as profitable.

[64] Broad-based Socio-Economic Empowerment Charter for the Mining and Minerals Industry 2018 at section *1(c)*.
[65] Supra note 1 at *s27*.

Whereas LSM has a lifetime of thirty years and the license can be renewed for a period not exceeding thirty years as well, ASM does not enjoy the same benefits.[66] The LSM sector is afforded a chance to grow and develop optimally. Even funders are more willing to invest in LSM than ASM as they are more likely to get a good rate of return on their investment from LSM than ASM. Thus, "most ASM operations find themselves in a situation where they cannot secure funding because the payback period does not make sense, they fail to secure long-term market contracts because they can only operate for a few years and they fail to invest back into their business because they are a few growth prospects."[67] Hence, the provisions of the mining permit in the MPRDA hinder the success of that sector and present barriers even to those who manage to acquire them. They are an impediment to the growth and development of the ASM sector as they restrict the lifetime of ASM projects. What the MPRDA has done is to grant access on a formal level but has not achieved in eradicating systemic challenges that may bar such access. For instance, the preference that is shown to LSM over ASM, in terms of investment, is not a true reflection of equitable access. Therefore, due to the limited access that is provided to ASM by the MPRDA, the ASM miners would rather mine informally as at least they will have unlimited and unregulated access to the mineral resources.

Generally, "mining laws that are mostly made for large scale mining are not always supportive and appropriate for small scale mining needs. Therefore, there is a need to lobby for a small scale mining sensitive legal framework which gives equal opportunities to the big and small players in the mining sector."[68] This means that mining laws have to provide equal opportunities to both LSM and ASM and be especially sensitive to ASM needs. It is very important that government understands why people are involved in ASM and are also unable to abandon their activities despite the punitive measures which would have been put in place. Generally, in a bid to advance LSM, "the belief is that in order to attract foreign multinational mining companies there must be a stable environment for mining, an image which illegal mining damages and therefore governments take punitive actions against it to attract investors."[69] Thus, instead of dealing with the root problem of ASM and why it persists, which is essentially a lack of access to minerals in the nation, governments would rather criminalise

[66] Ibid at *s23* and *s24.*
[67] Op cit note 3 at 41.
[68] Op cit note 15 at 15.
[69] Banchirigah S.M "Challenges with Eradicating Illegal Mining in Ghana: A Perspective from The Grassroots" (2008) 33 *Resources Policy* 29 at 32-33.

the activity as they view its persistence as a stumbling block for the growth and development of LSM in the nation.

Also, the MPRDA claims to facilitate the equitable distribution and exploitation of mineral resources in the nation and yet it is almost silent on ASM. It offers ASM limited access into the mining industry in terms of the type of ASM miners that can access those minerals as well as the duration of such exploitation. The MPRDA, however, is comprehensive on LSM and ensures the growth and development of the LSM sector. This shows the government's bias towards LSM which ultimately leads to the criminalisation of ASM activities in the promotion of LSM without any sensitivity to the plight of ASM. Artisanal mining is automatically illegal and the state has not really assessed its root causes such as a lack of access to the formal mining industry and the need to sustain their lives.[70] This is not to say that illegal mining should be condoned based on the circumstances of some people involved in such activities but rather that governments should not be quick to dismiss the plight of ASM miners. If we are going to criminalise a particular activity, the least one can do is to first deal with its root cause before rushing to punitive measures of dealing with it.

Artisanal miners often lack the capacity and skill required to gain formal entry into the mining industry and yet engage in mining to sustain their lives. If governments first solved the issue of access by either empowering them with the necessary skills required for mining or providing some sort of financial assistance to artisans then it will be justifiable for them to punish those who still fail to mine within the regulatory framework. Thus, mining authorities should be able to look at the root causes of ASM and then build structures that fit into the existing ASM communities and their needs. Also, equal access to minerals should be granted to both LSM and ASM, bearing in mind their different needs. In fact, governments should be able to promote investment into the small scale mining sector as much as it does for LSM. This will be in line with the notion of substantive equality as mechanisms specific to the ASM sector will be put in place to promote and facilitate access of the sector into the mining industry as a whole.

Furthermore, the MPRDA creates a loophole with its failure to differentiate between the different ASM groups and providing a proper definition of it in the Act. The MPRDA takes it for granted that all small scale activities are conducted in the same way and under the same circumstances and therefore lumps up all the interests for small scale mining together. As

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[70] Thornton R "Zama Zama, 'Illegal' Artisanal Miners, Misrepresented by the South African Press and Government" (2014) 1(2) *The Extractive Industries And Society* 1 at 127.

mentioned earlier, there are at least three separate categories of small scale mining each with its own unique characteristics.[71] However, the law on small scale mining applies across the board and lumps up all interests of small scale miners as if they were the same. "There generally has been a poor understanding of the whole sub-sector and its peculiar needs and in most cases it is often the needs of the artisans that are not captured under formal regimes."[72] This is evident in the MPRDA as not only does it fail to differentiate the different types of small scale mining and define them, it implicitly implies that all small scale miners operate at the same level. This is problematic as it effectively caters for the needs of certain small scale miners, especially those that can operate within the legal framework, and not others. Thus, it has its own type of small scale miners that it seeks to grant access to mining which is not necessarily reflective of the ASM sector on the ground.

For instance, the mining permit under the MPRDA caters for the first group of ASM miners as they have the financial and technical means required to formally enter into the sector. However, the Act fails to consider the needs of the third group of ASM miners which mainly consists of artisans mining for their own subsistence. Artisans normally neither have the means nor expert abilities required to formally enter the mining sector. Therefore, the lack of a nuanced definition of ASM and the inability of the Act to distinguish its various role players becomes problematic as it results in a lack of proper access to minerals for some. Thus, whilst the first group of ASM miners can easily access the sector as they fall under the ambit of what is captured in the Act[73], most artisans will not be able to formally access the sector as they neither have the means nor the technical ability required to get a mining permit. The MPRDA makes no provision for the assistance of artisans or other small players intending to join the mining industry. Hence, the Act is not only blind to the socio-economic disparities between LSM and ASM, but also to the disparities within the ASM sector itself that impede on access to minerals. This might not have been the intention of the legislature when they were drafting these laws but in practice it effectively seems as if that was the intention as this oversight effectively fails to substantially recognise and address the inequalities within the ASM sector itself.

That is, such a take on small scale mining effectively excludes those small scale miners, specifically the artisans, from the benefits of the law as their needs are not captured in the regulatory framework. Also, this is contradictory to the notion of equitable access as envisaged

[71] Also see Debrah Op cit note 55 at 916; 918.
[72] Ibid at 914.
[73] That is, they can meet the required criterion for the granting of a mining permit under the MPRDA.

by the MPRDA. This is so because equitable access to mineral resources demands that socio-economic circumstances of people be addressed when developing policy that affects an individual's or group's opportunity to access the mining industry. In this case, the provision on small scale mining in the MPRDA was drafted with one group of small scale miners in mind at the expense of other small scale mining groups. Therefore, in that sense, the MPRDA fails to provide equitable access in the ASM sector itself as access is only granted to a specific group of ASM miners and not the rest. The mere fact the MPRDA itself is a hindrance to the entry of ASM miners into the formal mining industry and also its failure to cater for the needs of all groups of ASM shows its failure to meet its own objectives. Also, the mere consideration of one branch of ASM and not the others fails to promote equality within the ASM sector and ultimately the mining sector as a whole. The Constitution stipulates that "everyone is equal before the law and has the right to equal protection and benefit of the law."[74] However, the fact that not all ASM miners are catered for in the MPRDA means that not all of them benefit from what the MPRDA has to offer. Hence, the failure of the MPRDA to facilitate equitable access to mineral resources for the ASM sector, within the sector itself and in the mining industry as a whole, violates the constitutional right to equality.

The environmental argument:

In South Africa, small-scale mining is involved in a number of commodities such as gold, diamonds and other precious metals.[75] However, the effective participation of ASM miners in the mining sector is hindered by their limited access to mineral deposits and also their lack of capital and technological skills. As mentioned earlier, some of these hindrances are as a result of the historical imbalances caused by the apartheid era in South Africa. Some of the imbalances continue to act as barriers to entry into the industry for small scale miners. Those who have managed to enter into the industry, such as the artisanal miners, are involved in activities that not only have a negative impact on their safety and health, but are also environmentally harmful. For example, due to the fact that ASM miners have limited skills and access to the appropriate technology used in mining, they often use mercury in the blasting of minerals such as gold and this results in environmental damage as it is often deposited near rivers and flows with the water.[76] This not only poses a health risk to those involved in the extraction of the minerals but also to the local communities were the mining is taking place as

[74] Supra note 2 at *s 9(1).*
[75] Ledwaba Op cit note 16 at 12.
[76] Op cit note 25.

they might be dependent on the water source. Also, due to a lack of knowledge on where the minerals actually are as well as the tools used to mine, the constant digging of sites and the abandonment of sites that prove unviable without their rehabilitation poses a significant blow to the environment. It is therefore imperative for ASM to be included in the mining regulatory framework and be granted access to minerals hence a proper mining regulatory framework that is inclusive of ASM and expressly grants them access to the industry is a necessity.

It is important to grant access to minerals to the ASM sector as this increases the chances of having a proper mining legislative framework that is more grounded to the realities of the society. That is, “these informal practices can be considered as coping mechanisms in an environment governed by an inflexible legal framework that is not in line with local realities.”[77] This suggests that the failure of the legal framework to provide a detailed legal framework to govern ASM and granting them proper access to minerals actually escalates the problems of ASM. It forces ASM miners, even those who want to abide by the law, to access the industry in some other ways which are not necessarily legal as the legislation will be denying them of proper access. Also, “the legal recognition of the informal sector also imposes duties to conform to environmental, labour and human rights standards. In this vein of rights and duties, a formal system is sometimes characterised as a win-win for both miners and the state.”[78] This indicates that including ASM miners into the regulatory framework makes it easier to regulate their conduct. This is so because certain mechanisms can be put in place to regulate how they should conduct their activities. Also, proper enforcement and compliance measures can be determined to ensure effective compliance with regulations. For example, administrative or criminal sanctions can be put in place to force people into compliance and hold them accountable for their actions where they fail to do so. Proper inclusion of ASM miners into the regulatory framework will minimize the levels of informal entries into the mining industry as if everyone’s interests are well catered for it leaves little room for excuses of non-compliance. Also, once they are all a part of the formal sector, it will be easier to impose other rules they have to comply with such as health and safety rules and environmental regulations they have to uphold and actually hold them accountable for a failure to do so. However, this is much easier where a proper regulatory framework is in place because then it will be able to capture ASM miners under its ambit and there can be no excuses for non-compliance. In this sense,

[77] Van Bockstael S “The Persistence of Informality: Perspectives on the future of Artisanal Mining in Liberia” (2014) 62 *Futures* 10 at 11.
[78] Siegel S & Veiga M “Artisanal and Small Scale Mining as an Extra-legal Economy: De Soto and The Definition of “Formalization” (2009) 34 *Resources Policy* 51 at 52.

therefore, access to minerals will be the first step to such formalization and effective regulation of the ASM sector.

Furthermore, drawing from the negative environmental impacts of ASM, it is important that the sector be granted formal access into the mining industry. One of the objectives of the MPRDA is to "give effect to section 24 of the Constitution by ensuring that the nation's mineral and petroleum resources are developed in an orderly and ecologically sustainable manner while promoting justifiable socio-economic development."[79] This essentially means that the extraction of mineral resources has to be done in an orderly fashion and has to be ecologically sustainable. As it stands, the exclusion of the ASM sector is ensuring that minerals are not extracted in an orderly manner. This is so because ASM activities are haphazard and are leaving detrimental environmental footprints everywhere and yet the state still has not figured out a substantive way to deal with it besides criminalising the activity. While criminalising illegal mining is essential, especially for compliance and enforcement purposes, it does not deal with the root cause of the problem which in this case is simply a lack of proper access to minerals for the ASM miners. Therefore, the inclusion of ASM into the formal mining sector will somewhat ensure that mining activities are undertaken in an orderly manner especially through the means of effective regulation.

Although mining is naturally environmentally invasive, its proper regulation can help in ensuring the mitigation of or, in certain circumstances, the total avoidance of any environmentally degrading activities. Mining is a listed activity under NEMA and therefore an EIA and EMP is required before a mining activity can commence.[80] An EIA informs the decision-making authority of all the environmental impacts of a proposed mining activity and on whether or not such an activity can be approved. The EMP, on the other hand, is used to ensure that any "undue or reasonably avoidable adverse impacts of a mining project are prevented and its positive benefits are enhanced."[81] Thus, both the EIA and the EMP are tools used in environmental management to minimise or prevent any adverse impacts of a mining activity. However, due to a lack of proper governance in ASM, most of its role players do not compile EIAs nor EMPs. Environmental harm caused by ASM activities is left unaccounted for as a proper regulatory framework that captures ASM activities has not been put in place.

[79] Supra note 1 at *s 2(h).*
[80] Supra note 59 at *s24.*
[81] Op cit note 58.

As mentioned earlier, one of the main reasons ASM miners disregard environmental management imperatives is their lack of financial and technical resources that enable them to meet such requirements. This lack of resources is essentially the main reason why they are failing to formally access the mining industry in the first place. A conundrum thus emerges as it becomes difficult to balance the need to provide access to mineral resources to a group of people that is not financially and technically capable and also require them to meet environmental management imperatives. The difficulty lies in the fact that the same lack of financial and technical resources which makes compliance with the requirements of formal entry into the mining sector difficult for ASM, is the same reason why there is non-compliance with environmental management requirements. However, there are other measures which the state can implement to enable compliance with environmental regulations and alleviate the financial and technical burden on ASM miners. For example, the state can assess environmental impact on behalf of ASM miners or provide ASM miners with technical or financial assistance in order to facilitate access into the mining industry and environmental compliance. This will likely lead to proper regulation of ASM environmental impacts and will also be in line with the NEMA principles on environmental protection and management thereby advancing the notion of sustainable development as the environment is inextricably linked with other facets of development.[82] Thus, granting access to minerals to ASM miners will somewhat fulfil the Constitutional environmental right[83] from an environmental context especially in terms of promoting ecologically sustainable activities.

Moreover, the constitution grants everyone a right to "an environment that is not harmful to their health or wellbeing and the state has a mandate to enact reasonable legislation that ensures ecologically sustainable development."[84] The MPRDA is one of the pieces of legislation put in place to give effect to the constitutional environmental right in the mining industry.[85] The exclusion of the ASM sector from the MPRDA is therefore actually an impediment to the advancement of the environmental right.[86] This is so because their activities have a huge detrimental impact on the environment and yet they are still not held accountable for the environmental damage they cause. Most artisanal miners are unskilled, lack the requisite knowledge for the optimal exploitation of minerals and also have little appreciation for the

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[82] *Fuel Retailers Association v Director-General: Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga Province and Others* 2007(6) SA 4 (CC).
[83] Supra note 2 at *s24*.
[84] Ibid.
[85] Supra note 1.
[86] Ibid.

environment. "ASM operations feature a number of rudimentary practices that pollute the air and contaminate resident water bodies and water bodies."[87] For example, the use of mercury during the amalgamation process releases methyl mercury which is toxic and poses a threat to the health of animals, humans and aquatic life.[88] This poses risk to human health and wellbeing thereby impeding on the constitutional right to an environment that is not harmful to health or wellbeing.[89] Also, the mining activities involve a lot of digging especially in river banks which ultimately causes erosion and siltation due to the large amounts of sediments being fed into the river systems. Thus, the activities of ASM have a huge and significant ecological footprint and hence the need for it to be controlled. The environmental right places a duty on the state to protect the environment from any harm either completely, or where it cannot be totally avoided, it can implement some appropriate mitigation measures for the harm. By failing to properly regulate ASM and contain its negative environmental footprint, the state is failing to fulfil its part of its Constitutional obligation to protect and advance the environmental right.

Lack of access to mineral resources is one of the main challenges in ASM. As mentioned earlier, this leads the ASM miners into trying to access the minerals in other unconventional ways that have a huge detrimental impact on the environment. Granting ASM miners access into the mining sector is not a guarantee of the total eradication of the environmental impacts they cause as mineral extraction will always be destructive to the environment by nature. However, granting ASM access to mineral resources will be a step forward towards the minimization of the environmental harms caused by ASM as then effective regulatory measures can be put in place for their environmental conduct. The MPRDA requires an EMP from small scale miners when applying for a mining permit.[90] Compiling an EMP requires technical expertise and finance and these resources are not readily available to ASM miners bearing in mind that most of them already come from poor backgrounds and are mining to sustain their own livelihoods. It is therefore important that ASM become a part of the formal mining sector, as the state will be able to determine how best to mitigate the environmental harm caused by their activities and also assess each mining activity and its possible environmental impacts before granting a mining permit. This will be in line with the NEMA[91]

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[87] Ncube-Phiri S, Ncube A "Artisanal and Small Scale Mining: Potential Ecological Disaster in Mzingwane District, Zimbabwe" (2015) 7(1) *Journal for Disaster Risk Studies* 1 at 4; also see Hilson G "The Environmental Impact of Small Scale Gold Mining in Ghana: Identifying Problems and Possible Solutions" (2002) 168:1 *The Geographical Journal* 57 at 59-61, 64-66.
[88] Ibid.
[89] Supra note 2 at *s 24(a).*
[90] Supra note 1 at *s27.*
[91] Op cit note 59.

principles which require that the use and exploitation of natural resources be done in a responsible and equitable manner and that any environmental harm should be avoided or mitigated.[92] Hence, in granting access to the mining industry for the ASM sector, the state will also be discharging its Constitutional obligation to protect and advance the environmental right as well as promote sustainable development.

In a nutshell, the principles of equity and the need to protect the environment require that ASM be included into the mineral regulatory framework of South Africa. This is so because the exclusion of ASM from the mining sector violates the constitutional right to equality due to its failure to substantially and meaningfully provide access to mineral resources to the ASM sector. It also impedes on the constitutional environmental right as the lack of governance of the ASM sector under the MPRDA effectively results in the negative environmental impacts of ASM being left unaccounted for which goes against the constitutional mandate to ensure sustainable ecological development. However, a conundrum is created as the same lack of access to financial and technical resources that is also preventing ASM miners from accessing mineral resources is the same reason why they are failing to comply with environmental management requisites under South African environmental laws. The question of how then equitable access to mineral resources can be granted to the ASM sector, bearing in mind the above conundrum, arises.

HOW CAN EQUITABLE ACCESS TO MINERAL RESOURCES BE GRANTED TO THE ARTISANAL AND SMALL SCALE MINING SECTOR?

From the above, it is clear that the MPRDA fails to provide equitable access to minerals to ASM. This section therefore aims to establish ways in which the state can ensure equitable access to mineral resources in the ASM sector.

As the MPRDA itself has failed to grant equitable access to mineral resources in the ASM sector, it is clear that some form of legislative intervention is required that will grant such access to ASM miners and bring them within the regulatory framework.[93] However, before any legislative intervention is undertaken, it has to be understood that the lack of governance in the ASM sector is mainly caused by the fact that the ASM sector is the most misunderstood sector. This is partly because there is generally not enough information available about it. It is not exactly clear how many people are involved in the ASM sector and their specific locations, especially for artisanal miners, and this can be problematic especially for support initiatives as

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[92] Ibid at *s 2(a) (4) (ii); s 2(a) (4) (v).*
[93] Hilson Op cit note 12 at 67.

well as for regulatory purposes especially in terms of determining who to grant access to minerals and what kind of access should be granted. Generally, "insufficient knowledge of small scale populations and surrounding geology has often led to the implementation of inappropriate equipment and assistance schemes for ASM."[94] Thus, insufficient knowledge of the sector has further complicated the problem as inappropriate or incompetent support is being provided for ASM. This is evident in the MPRDA as it seems to have taken a "one size fits all" approach to small scale mining or rather just caters for one sub-category of ASM and not the rest. Had adequate information been gathered before an attempt to regulate the sector, then the provision would not be as inadequate as it is in the kind of access it provides. There is need to conduct a proper research into the ASM industry and gather adequate information about it before any legislative intervention can be made so that legislation will match the practical realities of the industry.

Also, "research should be conducted to assess the support structures required in the ASM sector, their roles and responsibilities, the support they should provide to the miners and the accessibility and adequacy of those services."[95] That is, proper support structures that cater for the needs of ASM miners need to be put in place and they need to be aware of the current challenges of the sector in order to identify their key intervention areas. Thus, to provide for equitable access to minerals in the ASM sector and mining industry as a whole, legislation should be able to incorporate the needs of all involved in the ASM sector. It means that they should be able to "carry out a systematic analysis of the sector based on the socio-economic status of the miners, the type of minerals exploited, the number of miners to be defined as ASM, their production values and strategies for effective mineral beneficiation."[96] This essentially means that the state should be intentional in finding out as much information as possible about the ASM sector before they can even think about regulating it or criminalising the activity. Knowledge about the sector and how it operates is especially helpful in determining what equitable access to minerals would actually be for that sector and how it is to be granted.

Once proper research has been undertaken and the state has gathered adequate information on the ASM sector as a whole, appropriate legislation has to be enacted to regulate the sector. As the MPRDA is the main mining legislation, an amendment to the MPRDA in the form of a

[94] Ibid at 28-29.
[95] Ledwaba Op cit note 16 at 14-15.
[96] Op cit note 55 at 920.

separate chapter that specifically deals with ASM is imperative. This helps to put adequate focus on ASM and take into account some of its characteristics that are unique to mining in general. This legislative intervention must be realistic and cater for the specific needs of ASM as well as its different sub-categories. There are different types of small scale mining and they all conduct their activities in a somewhat different manner in some instances. These categories need to be correctly distinguished and a proper definition for them be stipulated in the MPRDA. Thus, the legislative amendment must be able to specifically cater for each category, expressly stipulate the types of ASM it caters for and the ones that fall outside its ambit.[97] That is, the regulation of ASM must be apparent in the MPRDA and the type of access granted must be expressly stipulated and must be in accordance with the specific needs of each group of ASM. This means that in order to promote equitable access to minerals in the ASM sector, legislation cannot loosely define ASM or use a "one size fits all" type of definition for the sector.

For instance, the permitting system used for the first category of ASM miners should be different from the one applicable to artisans. Unlike the first category of ASM miners that mine for profit, artisans mine for their subsistence and cannot afford to meet the financial and procedural requirements needed to obtain a mining permit. Therefore, the permitting system should be different allowing for institutional support specifically in relation to artisans to help them obtain permits. For example, first category small-scale miners could obtain permits via the normal procedure provided for in the MPRDA as they were already doing whilst the state could subsidise the financial and technical burdens of artisans and grant them permits that allows them to operate in specific ASM designated areas and not on their own land. There really has to be clarity on the definition of ASM and what it involves as this helps with the effective regulation of the sector. That is, there has to be a clear definition of ASM that broadly reflects the South African context as this will allow us to know exactly what we mean by ASM and also help in determining the kind of ASM interventions required. We cannot possibly regulate something if we do not really know or understand what it is about. Neither can we grant access to something we cannot even define ourselves. Hence, the need to properly define and distinguish the different types of ASM in order to determine what equitable access to minerals will then be in that particular sector and then ultimately grant it.

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[97]Moosa F "The Case for Giving Zama Zamas Mining Rights" Mail and Guardian 5 September 2017 accessed at https://mg.co.za/article/2017-09-05-case-for-giving-zama-zamas-mining-rights
Also see Nhlengetwa K & Hein K "Zama Zama mining in the Durban Deep/Roodepoort Area of Johannesburg, South Africa: An Invasive or Alternative Livelihoods" (2015)2 *The Extractive Industries and Societies* 1.

Generally, there is need for greater institutional support for ASM operations. The legislative intervention should be able to facilitate the creation and maintenance of proper institutional structures that adequately support ASM operations. The Department of Mineral Resources (DMR) has spearheaded several programmes such as the National Small-scale Development Framework (1999) to help provide miners with the necessary financial and technical assistance required to ensure the success of their operations. However, "while these programmes may have improved the operations of some ASM projects, they appear to have made an insignificant impact on the sector, given its status."[98] Thus, despite some state interventions into the ASM sector, the problem still persists as adequate support best suited for the unique complexities of the sector is not being provided.

Also, access to minerals is being hindered in the ASM sector due to the fact that it is difficult to actually find out where the viable mineral deposits are located or how best to exploit them. Thus, "small scale operators often lack the necessary information, particularly regarding the location of minerals, geology and mineral quality, technical mining and processing techniques and minerals marketing."[99] This shows how the lack of access into the mining industry is not just limited to the actual difficulties encountered in trying to obtain a mining permit, but also extends to information concerning the actual exploitation of those minerals. Thus, some people might be able to obtain the permits but may still fail to access the minerals because they will not have the necessary information concerning the actual exploitation of those minerals at their disposal. This information is crucial as it is central to the decision of whether or not a particular mining activity will be optimal for the miner. That is, the mere access to the necessary information regarding the exploitation of minerals actually promotes access to minerals especially to ASM miners. They are not always in positions that enable them to be immediately equipped with such information especially considering the way ASM sector is currently regulated and the form and manner in which it is carried out.

Moreover, this will be essentially important for the protection of the environment and the promotion of ecologically sustainable development of mineral resources. Readily available information on viable mineral exploitation will help reduce futile excavations that often lead to unaccounted for environmental damage. Also, information could also be in the form of how best to exploit certain mineral deposits and this could be provided by conducting workshops and training programmes that seek to educate and empower ASM miners by providing them

[98] Ledwaba Op cit note 16 at 19-20.
[99] Ledwaba Op cit note 3 at 39.

with the necessary skills and knowledge required for optimal mineral exploitation. Therefore, legislation should provide for this mechanism as access to such information will not only empower ASM miners in terms of how to go about executing their activities, but it is most likely capable of preventing the futile excavation of minerals thereby minimising the environmental impacts of ASM.

Furthermore, "it has been argued that the implementation of procedurally complex legislation for small scale mining has been a major disincentive for miners' registration."[100] This suggests that the legal provisions regarding small scale mining could be a barrier to the entry of small scale miners into the formal mining industry as they may be too complex for them to comprehend or provide strenuous conditions for them to comply with and legally access the minerals. Thus, "the mining policies of most countries are usually in a language too complex for the small scale miners to comprehend."[101] Considering that most ASM miners, especially artisanal miners, are from poor backgrounds and may not be literate enough to understand complex language or have the capacity to go through complex procedures, such an impediment prevents proper access into the industry. These procedural complexities can be resolved by introducing awareness programmes designed to educate ASM miners on the relevant procedures and how each process works in a language and manner that they would understand.

Also, complexities can be in terms of the procedures followed to get a mining permit or the requirements that have to be met for a permit to be granted. For instance, the amount of capital that is required by the MPRDA act as a restriction to small scale mining as most of them are not able to meet those requirements. For example, "the pre-feasibility study which often requires the drilling of boreholes and the environmental impact assessment which can only be done by professionals with high consultation fees."[102] The financial burden here is too much and it prevents most small scale miners from the formal entry into the sector. Furthermore, it prevents others who might be interested in the sector from entering into the sector at all while on the other hand, it promotes illegal mining. Hence, it is important to provide access to minerals to ASM by imposing less stringent conditions of entry. However, imposing less stringent entry conditions conflicts with environmental management laws as part of the hefty

[100]Hilson G and Potter C "Why Is Illegal Gold Mining Activity So Ubiquitous in Rural Ghana?" (2003) 15:2 *African Development Review* 237 at 254; also see Hentschel T, Hrushka F et al "Global Report on Artisanal and Small Scale Mining"- Mining Minerals and Sustainable Development Working Paper No70 (2002) available at https://www.ddigglobal.org/login/resources/goo723.pdf at 30.
[101] Mutemeri Op cit note 25 at 288.
[102] Ledwaba Op cit note 3 at 41.

financial burden is due to the need to carry out EIAs and compile EMPs. To alleviate this burden on ASM miners and to ensure that there is no conflict between our mining laws and environmental laws, the state could carry out EIAs and compile EMPs on behalf of ASM miners who cannot afford to do so themselves. The use of strategic environmental assessments (SEA) may become handy in this regard.

SEA refers to a "systemic decision-making process which is aimed at ensuring that environmental and other sustainability issues are considered effectively in policies, plans and programmes."[103] Thus, it is a tool used to ensure that both environmental and sustainability considerations are taken into account before a decision is made. SEA evolved from the EIA process however, "while EIA focuses on the environmental impacts of a specific development project once it has been formulated, SEA allows for the decision-maker to proactively determine the most suitable development type for a particular area before development proposals are formulated."[104] That is, a SEA is undertaken in an area to determine the kind of development that can occur there and its subsequent environmental and sustainability issues before policies and plans can be formulated for it.

This can be helpful in the case of ASM as a SEA will help to inform the state on all the environmental and other sustainability issues such as social, economic and cultural implications of ASM in a particular area or region. This information can then be used to formulate the appropriate legislation, policies and plans in a bid to promote equitable access to mineral resources with all the sustainability issues in mind. That way the state will not have to wait for an ASM miner to do an EIA for a particular development project as they would have the information already. This enables the state to then determine how ASM permits should be granted in that particular area and can also enable them to compile comprehensive EMPs based on the information gathered from the SEA. This will help in promoting access to the mining industry and also reduce the financial and technical burden on ASM miners as the state takes on the burden. SEAs will have a direct impact in ensuring that there is improved compliance with the mining permit process since a part of the process would have been made easy on ASM

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[103] DEAT (2004) Strategic Environmental Assessment, Integrated Environmental Management, Information Series 10, Department of Environmental Affairs and Tourism (DEAT), Pretoria available at https://www.environment.gov.za/sites/default/files/docs/series10_strategic_environmental_assessment.pdf at 2; 5-6.

[104] Ibid; also see Fundingsland Tetlow M & Hanusch M "Strategic Environmental Assessment: The State of the Art" 30:1 (2012) *Impact Assessment and Project Appraisal* 15 at 16.

miners. Also, SEAs help to ensure that measures to mitigate or prevent environmental harm are put in place before any ASM activity can take place.

Thus, ASM cannot be regulated or governed in the same way as LSM as the two operate on different spheres of the mining sector therefore, ASM legislative frameworks are required. There is need for legislation that is less complex in terms of its procedure and language used and actually provide an incentive for people to want to join the formal sector. If the process is less complicated especially for the artisans who are mostly situated in rural areas and may not be literate enough to understand complex language and procedures, it will most likely lead to an increase in the number of people willing to join the formal sector. Generally, "the ASM community is close-knit therefore, word that the system has improved would undoubtedly spread rapidly."[105] Therefore, a mere change in the application of the procedural requirements for small scale mining into something more equitable and reasonable for small scale miners will most likely lead to an influx of small scale miners joining the formal sector. This will be good for regulatory purposes and at the same time, it will ensure that equitable access to mineral resources is granted.

Furthermore, equitable access to minerals in ASM may be achieved by containing ASM activities to specific designated areas set aside specifically for ASM. This will be especially important for the effective regulation of illegal artisans as they will now be contained in a specific location and it will become easier to regulate their conduct. Therefore, "legislation can prescribe the selection of designated areas based upon their 'technical' suitability as determined by geological surveys by the state or on the basis that such land is unsuitable for large scale mining."[106] Thus, the state can undertake some geological surveys to determine which areas are best suitable for ASM and then expressly allocate those mineral deposits to them. This could be implemented via a permit system of some sort but it has to be within the means and capabilities of ASM miners. For example, the Minerals and Mining Act[107] of Ghana empowers the Minister to designate ASM areas if it is in the public interest to promote ASM in that particular area. To mine in those areas people then have to register with the District Office of the Minerals Commission charged with ASM management and then also apply for an ASM licence under the Act.[108]

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[105] Hilson Op cit note 100 at 261.
[106] Corbett T et al "Designated Areas and the Regulation of Artisanal and Small Scale Mining" 68(2017) *Land Use Policy* 393 at 394.
[107] 703 of 2006 at *s89*.
[108] Ibid at *s82*.

South Africa could also take a similar approach in its legislation and empower the Minister of Mineral Resources to establish such designated areas based on geological and financial viability of the land. However, the designation of ASM areas is likely to cause land disputes between landowners and also may result in jurisdictional conflicts between organs of state in terms of land use planning. That is, there could be plenty of competing land demands if the designation process is not well managed. For instance, land allocation problems in Ghana has led to a lack of implementation of the legislation on designation of ASM areas and this has escalated illegal mining in the country.[109] Thus, it is very important that procedures to manage land use conflicts when designating ASM areas are expressly set. Land use conflicts could be mitigated by notifying affected parties well in advance before the designation is effected. Community participation is imperative in this regard especially with regards to affected landowners.

However, despite its inherent challenges, the designation of ASM areas will most likely result in increased access to minerals for ASM miners as people will not have to try to illegally access them when they have a whole area designated to them. However, the success of this depends on the government providing those keen on registering for ASM with productive concessions.[110] Thus, the viability of the mineral deposits must have been pre-determined before access to such minerals can be granted to ASM miners. Also, the land provided must be sufficiently suitable for ASM in terms of the minerals sought after by ASM as if not, this might lead them to go to other areas with the minerals they want causing an influx of people in those areas or they will just resort to informal mining. Also, the land should be in a location that allows for the economic exploitation of those minerals and can be accessed by a majority of small scale miners involved in the activity.

Designating specific ASM areas would be a good idea in terms of our Environmental Law as then the environmental impacts of the mining activity for the whole area can be pre-assessed and measures to deal with them will be put in place before it is deemed a designated area for ASM. Designated areas for ASM can "make it easier and less expensive for regulators to track and control the movement of miners by concentrating them in discrete areas as opposed to having them dispersed across what are often remote and inaccessible regions."[111] This can facilitate effective regulation of ASM and will also allow the state to control and contain their

[109] Op cit note 106 at 396.
[110] Hilson Op cit note 100 at 260-261.
[111] Op cit note 106 at 394.

environmental footprint. For example, the state can implement certain regulatory initiatives such as a ban on the use of mercury during mineral exploitation in designated areas and non-compliance with such initiatives will be met with relevant penalties. Thus, it is much easier to regulate ASM conduct when it is contained to one area than when it is operating in a haphazard manner. Designated areas for ASM therefore help in the effective consolidation of environmental management initiatives such as EIAs and other measures. However, although the designation of specific ASM areas will help in the access of minerals to ASM, its success as "a potential regulatory tool depends on the willingness of the government to afford priority to ASM and not simply view it as a necessary evil that can be tolerated to the extent that it does not impede on large scale mining development."[112] Thus, the government should be intentional in promoting the ASM agenda in order for this tool to succeed and allow for access to minerals to ASM.

CONCLUSION

ASM is a growing sector in the mining industry and not only does it pose a great threat to the environment, it is currently side lined in the industry in favour of large scale mining. The MPRDA was enacted as a transformative tool to open up the mining industry to previously disadvantaged people and grant them equitable access to mineral resources. However, the Act is failing to fulfil its mandate by excluding ASM within its ambit and granting limited access to minerals to only a specific group of ASM miners. The Act is failing to cater for the specific needs of ASM and it is difficult for ASM miners to formally enter into the mining industry as the conditions of entry are also quite onerous and present a huge financial and technical burden on them. The failure of the MPRDA to include ASM in its ambit actually creates a gap in our law that then allows ASM miners to informally access minerals and mostly to the detriment of environmental sustainability. This exclusion is in fact a violation of the constitutional right to equality as ASM miners are not able to substantially and meaningfully participate in the mining industry. Also, the failure of the MPRDA to substantively regulate ASM activities is resulting in a lack of governance of that sector which effectively results in the negative environmental impacts of ASM activities being left unaccounted for. Such an oversight is an infringement on the constitutional environmental right which places an obligation on the state to enact legislation that ensures sustainable ecological development.

[112] Ibid at 400.

Although a conundrum is created in trying to create equitable access to mineral resources and upholding environmental regulations, it is imperative that an amendment to the MPRDA especially in the form of a separate chapter specifically dealing with ASM is enacted. In a bid to promote equitable access to mineral resources in the mining sector, this amendment should be able to define ASM, capture the practical realities of the ASM sector in South Africa and expressly stipulate the kind of ASM interventions the state is required to do. The effective regulation of ASM will not only help in granting the sector formal access to the mining industry, but is a constitutional imperative on the basis of equality and also in a bid to promote the advancement of the environmental right. Thus, Governments need to intentionally take a stand and give priority to ASM. Most importantly, whatever access to minerals is granted to ASM not only has to be equitable and well within their means and needs, it also has to lead to sustainable mining and the protection of both mining and environmental laws.

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