

# **Embracing Sustainable Mining in Africa**

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**Kariuki Muigua**

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## **Embracing Sustainable Mining in Africa**

**Kariuki Muigua\***

### **Abstract**

*The paper critically explores the idea of sustainable mining in Africa. It argues a case for embracing sustainable mining in order to achieve Sustainable Development in Africa given the abundance of mineral resources in the continent. The paper discusses the concept of sustainable mining and the progress made towards its realization in Africa. The paper further examines some of the challenges hindering sustainability in the mining sector in Africa. It then suggests recommendations towards embracing sustainable mining in Africa.*

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## **1.0 Introduction**

Mining refers to the act, process or industry of extracting minerals from the earth<sup>1</sup>. It has also been defined as an economic activity that consists of extraction of potentially useable and non-renewable mineral resources (excluding petroleum, natural gas and water) from land and sea without involving agriculture, forestry and fisheries<sup>2</sup>. The *Mining Act*<sup>3</sup> of Kenya defines minerals as geological substances whether in solid, liquid or gaseous form occurring naturally in or on the earth, in or under water, in mine waste or tailing but does not include petroleum, hydrocarbon gases or groundwater.

Mining is an important industry that contributes significantly to the global economy. Minerals are critical to the social, political and economic activity of any country<sup>4</sup>. They are core raw materials for the manufacturing sector, high technology industries, resource industries and the construction industry<sup>5</sup>. It has been observed that minerals and mineral products are the backbone of most industries in the world and some form of mining or quarrying is carried out in nearly every country<sup>6</sup>. Mining therefore has important economic, environmental, labour and social effects<sup>7</sup>. It ensures availability of minerals that are needed to construct roads and hospitals, to build automobiles and houses, to make computers and satellites, to generate electricity, and to provide the many other goods and services that consumers enjoy<sup>8</sup>. It is also a major source of employment in many countries<sup>9</sup>.

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<sup>1</sup> United Nations Environment Programme., 'Mining.' Available at <https://leap.unep.org/knowledge/glossary/mining> (Accessed on 28/09/2023)

<sup>2</sup> Muigua. K., Wamukoya. D., & Kariuki. F., 'Natural Resources and Environmental Justice in Kenya.' Glenwood Publishers Limited, 2015

<sup>3</sup> Mining Act, No. 12 of 2016, Laws of Kenya, S 4

<sup>4</sup> Muigua. K., Wamukoya. D., & Kariuki. F., 'Natural Resources and Environmental Justice in Kenya.' Op Cit

<sup>5</sup> Ibid

<sup>6</sup> International Labour Organization., 'Mining (Coal; other Mining) Sector.' Available at <https://www.ilo.org/global/industries-and-sectors/mining/lang--en/index.htm> (Accessed on 28/09/2023)

<sup>7</sup> Ibid

<sup>8</sup> National Academies Press., 'Evolutionary and Revolutionary Technologies for Mining.' Available at <https://nap.nationalacademies.org/read/10318/chapter/4> (Accessed on 28/09/2023)

<sup>9</sup> Ibid

However, despite its importance as an economic activity, mining and subsequent processing of strategic elements can be harmful to the environment<sup>10</sup>. Further, it has been observed that the rates of death, injury and disease among the world's mineworkers remain high, and mining remains the most hazardous occupation when the number of people exposed to risk is taken into account<sup>11</sup>. These challenges have led to the emergence of the concept of sustainable mining.

The paper critically explores the idea of sustainable mining in Africa. It argues a case for embracing sustainable mining in order to achieve Sustainable Development in Africa given the abundance of mineral resources in the continent. The paper discusses the concept of sustainable mining and the progress made towards its realization in Africa. The paper further examines some of the challenges hindering sustainability in the mining sector in Africa. It then suggests recommendations towards embracing sustainable mining in Africa.

## **2.0 Conceptualizing Sustainable Mining**

Mining ensures the availability of vital raw materials and resources that drive societies forward and ignite economic growth and technological advancement<sup>12</sup>. However, the critical need to mine must be balanced with a holistic environmental and social responsibility<sup>13</sup>. Sustainable mining entails optimizing environmental performance and social impact of mining activities<sup>14</sup>. Sustainable mining also entails ensuring sound labour

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<sup>10</sup> Massachusetts Institute of Technology., 'The Future of Strategic Natural Resources.' Available at <https://web.mit.edu/12.000/www/m2016/finalwebsite/solutions/mining.html> (Accessed on 28/09/2023)

<sup>11</sup> International Labour Organization., 'Mining (Coal; other Mining) Sector.' Op Cit

<sup>12</sup> Pan African Resources., 'Sustainable Mining.' Available at <https://www.panafricanresources.com/sustainable-mining/#:~:text=Sustainable%20mining%20refers%20to%20the,generations%20can%20also%20be%20me> (Accessed on 02/10/2023)

<sup>13</sup> Ibid

<sup>14</sup> Ibid

practices including good safety standards and paying workers a fair wage<sup>15</sup>. It also focuses on investing in the tools, equipment and training needed to safeguard workers as much as possible<sup>16</sup>.

It has been pointed out that community engagement is at the heart of mining sustainability<sup>17</sup>. The employment opportunities and economic activities generated by mining processes are beneficial to social sustainability and community well-being<sup>18</sup>. Sustainable mining operations therefore consider social investment, focus on the economic and social returns in the community and on building community resilience.<sup>19</sup> Further, in order to foster community engagement, sustainable mining entails obtaining the consent of local communities at all stages in the lifecycle of a mine from mineral right application to the closure and rehabilitation of the mining sites<sup>20</sup>. The concept of Free, Prior, and Informed Consent (FPIC) is therefore vital in the sustainable mining agenda<sup>21</sup>. The global call for application of Free, Prior, and Informed Consent (FPIC) in mining is generally meant to address the abuse of the rights of indigenous peoples worldwide including: indigenous land rights, recognition of and respect for culture, the right to economic participation, to a livelihood and to a clean environment, among others<sup>22</sup>.

Various strategies have been embraced to foster sustainable mining. It has been pointed out that Corporate Social Responsibility (CSR) is an integral component of sustainable

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<sup>15</sup> Sammour, J., 'What Exactly is Ethical Mining?.' Available at <https://www.daintylondon.com/blogs/news/what-is-ethical-mining#:~:text=Whether%20mining%20metals%2C%20diamonds%20or,its%20workers%20a%20fair%20wage> (Accessed on 02/10/2023)

<sup>16</sup> Ibid

<sup>17</sup> Well Planning Group., 'At The Heart of Mining Sustainability is Community Engagement.' Available at <https://www.wallplanning.com.au/at-the-heart-of-mining-sustainability-is-community-engagement/#:~:text=You'll%20likely%20have%20heard,%3A%20Social%2C%20Environmental%2C%20Economic> (Accessed on 02/10/2023)

<sup>18</sup> Ibid

<sup>19</sup> Ibid

<sup>20</sup> Mathiba, G., 'The Incorporation of the FPIC Principle in South African Policy on Mining-Induced Displacements.' *International Journal on Minority and Group Rights.*, 2023 (1-23)

<sup>21</sup> Muigua, K., 'Maximising the Right to Free, Prior, and Informed Consent for Enhanced Environmental Justice in Kenya.' Available at <http://kmco.co.ke/wp-content/uploads/2019/03/Maximising-the-Right-to-FPIC-in-Kenya-Kariuki-Muigua-29th-March-2019.pdf> (Accessed on 02/10/2023)

<sup>22</sup> Ibid

mining due to the nature of activities undertaken by mining companies<sup>23</sup>. CSR in relation to mining entails a set of voluntary actions to mitigate the negative environmental and social impact of mining or to improve the social and economic well-being of populations living close to where mining companies operate<sup>24</sup>. It ensures the inclusion of social interests, environmental protection and a relationship with local community groups in the company strategies adopted by mining corporations<sup>25</sup>. Mining companies can therefore foster sustainable mining by embracing CSR practices including investments in public services and infrastructure, contributions to local agriculture and other economic activities, as well as payments to support the cultural or political activities of communities in mining areas<sup>26</sup>. Sustainable mining can also be realized through several approaches including reducing, reusing and rethinking mining waste, promoting water conservation, lowering carbon emissions by transitioning to renewable energy, ensuring the long term well-being of local communities, restoring land to its natural state and combatting illegal mining and its impact and communities and the environment<sup>27</sup>.

It has been argued that sustainable mining can foster the attainment of the Sustainable Development Goals (SDGs) envisioned by the United Nations<sup>28</sup>. Sustainable mining can enhance realization of most of the SDGs including ending extreme poverty; ensuring healthy lives and promoting well-being for all people; ensuring inclusive and equitable quality education and promoting lifelong learning opportunities; promoting sustained, inclusive and sustainable economic growth; fostering inclusive and sustainable industrialization and enhancing innovation; and promoting sustainable consumption and production patterns<sup>29</sup>. The *United Nations Global Compact Strategy 2021-23* aims to accelerate and scale the global collective impact of business and deliver the SDGs through

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<sup>23</sup> Majer. M., 'The Practice of Mining Companies in Building Relationships with Local Communities in the Context of CSR Formula.' *Journal of Sustainable Mining*, 12 (3): 38-47

<sup>24</sup> Bezzola. S et al., 'CSR and Local Conflicts in African Mining Communities.' *World Development*, Volume 158, 2022

<sup>25</sup> Ibid

<sup>26</sup> Ibid

<sup>27</sup> Pan African Resources., 'Sustainable Mining.' Op Cit

<sup>28</sup> Ibid

<sup>29</sup> Ibid

accountable companies and ecosystems that enable change<sup>30</sup>. It encapsulates principles that are integral in achieving this aim which focus on human rights, labour, environment and anti-corruption<sup>31</sup>. Mining companies can embrace this strategy in order to promote sustainable mining.

### **3.0 Sustainable Mining in Africa**

Africa is a continent that is richly endowed with a variety of mineral resources, with potential for economic growth and development<sup>32</sup>. The continent is home to approximately 30% of the world's mineral reserves<sup>33</sup>. The Democratic Republic of the Congo (DRC), for example, produces over 70% of the world's cobalt<sup>34</sup>. DRC and Zambia together supply nearly 10% of global copper<sup>35</sup>. Botswana and South Africa produce a significant amount of diamond while Ghana and South Africa are significantly endowed with gold deposits<sup>36</sup>. Africa is therefore classified as a major producer of many key mineral commodities in the world, with bountiful reserves of vital metals and minerals including gold, diamond, cobalt, bauxite, iron ore, coal, and copper available across the

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<sup>30</sup> United Nations Global Compact., 'UN Global Compact Strategy 2021-2023.' Available at [https://ungc-communications-assets.s3.amazonaws.com/docs/about\\_the\\_gc/UN-GLOBAL-COMPACT-STRATEGY-2021-2023.pdf](https://ungc-communications-assets.s3.amazonaws.com/docs/about_the_gc/UN-GLOBAL-COMPACT-STRATEGY-2021-2023.pdf) (Accessed on 02/10/2023)

<sup>31</sup> Ibid

<sup>32</sup> United Nations Economic Commission for Africa., 'Africa Mining Vision Guidelines.' Available at <https://www.uneca.org/african-mining-vision-guidelines#:~:text=The%20overall%20goal%20of%20the,and%20socio%2Deconomic%20development%E2%80%9D> (Accessed on 03/10/2023)

<sup>33</sup> White & Case., 'Don't Let a Crisis Go to Waste: Financing Mining & Metals Projects in Africa in 2023.' Available at <https://www.whitecase.com/insight-our-thinking/africa-focus-summer-2023-financing-mining-metals-projects#:~:text=Africa%20holds%20a%20remarkable%2030,sector's%20global%20revenue%20in%202022.> (Accessed on 03/10/2023)

<sup>34</sup> United Nations., 'African Countries Urged to Prioritize Green Value Chains for Minerals.' Available at <https://www.un.org/africarenewal/magazine/february-2023/african-countries-urged-prioritize-green-value-chains-minerals#:~:text=Africa%20is%20home%20to%20many,platinum%20metals%2C%20lithium%20and%20more> (Accessed on 03/10/2023)

<sup>35</sup> Ibid

<sup>36</sup> Statista., 'Mining Industry in Africa - Statistics & Facts.' Available at <https://www.statista.com/topics/7205/mining-industry-in-africa/> (Accessed on 03/10/2023)



continent<sup>37</sup>. Some of the major mining countries in Africa are DRC, South Africa, Namibia, and Zimbabwe<sup>38</sup>. Kenya is also richly endowed with industrial minerals including soda ash, fluorspar, diatomite and gemstones<sup>39</sup>. Further, it has been argued that Africa has an opportunity to emerge as a production hub for 'rare earths' with significant deposits being available in the continent especially in eastern and southern countries including South Africa, Madagascar, Malawi, Kenya, Namibia, Mozambique, Tanzania, Zambia and Burundi<sup>40</sup>. Rare earths have been described as the catalysts of industrial societies in the 21<sup>st</sup> century since they are vital to key products from hi-tech items including smartphones and monitors to energy conversion systems such as wind turbines, photovoltaic panels and electrical machinery and even military equipment including lasers and radar<sup>41</sup>. Sustainable mining is therefore a pertinent concern in Africa in order to ensure that the abundant mineral resources in the continent are able to trigger social and economic development<sup>42</sup>.

The *Africa Mining Vision*<sup>43</sup> seeks to achieve transparent, equitable and optimal exploitation of mineral resources in Africa in order to underpin broad-based sustainable growth and socio-economic development. It recognizes the need for a sustainable and well-governed mining sector in Africa that effectively garners and deploys resource rents and that is safe, healthy, gender and ethnically inclusive, environmentally friendly, socially responsible and appreciated by surrounding communities<sup>44</sup>. The Vision identifies the challenges that riddle the mining industry in Africa including

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<sup>37</sup> Ibid

<sup>38</sup> Ibid

<sup>39</sup> Muigua. K., Wamukoya. D., & Kariuki. F., 'Natural Resources and Environmental Justice in Kenya.' Op Cit

<sup>40</sup> Italian Institute for International Political Studies., 'The Scramble for Africa's Rare Earths: China is not Alone.' Available at <https://www.ispionline.it/en/publication/scramble-africas-rare-earths-china-not-alone-30725> (Accessed on 03/10/2023)

<sup>41</sup> Ibid

<sup>42</sup> Muigua. K., Wamukoya. D., & Kariuki. F., 'Natural Resources and Environmental Justice in Kenya.' Op Cit

<sup>43</sup> Africa Union., 'Africa Mining Vision.' Available at [https://au.int/sites/default/files/documents/30995-doc-africa\\_mining\\_vision\\_english\\_1.pdf](https://au.int/sites/default/files/documents/30995-doc-africa_mining_vision_english_1.pdf) (Accessed on 03/10/2023)

<sup>44</sup> Ibid

environmental, social and cultural concerns and proposes several solutions to address these challenges<sup>45</sup>. The Vision not only seeks to guide the mining industry in Africa, but it also aims at ensuring sustainable utilization of natural resources in Africa in order to ensure that the continent's natural resources are used to transform the social and economic development path of the continent<sup>46</sup>. Further, the Vision seeks to ensure the adoption of an integrated approach in the governance of Africa's mineral resources and the involvement of all stakeholders in the governance process<sup>47</sup>.

The Africa Mining Vision explores how development can be achieved through the creation of local value, driven by the strategic use of mineral resources in Africa<sup>48</sup>. It charts a path for generating and realizing various types of linkages arising from the mining sector through measures such as industrial development and technical upgrading<sup>49</sup>. Further, the Africa Mining Vision recognizes the contribution of Artisanal and Small-Scale mining (ASM) to local economic development, and fosters women's rights and gender justice<sup>50</sup>. The Vision also establishes a progressive fiscal regime that can curb the financial misuse of the continent's resources through tax evasion and avoidance and illicit financial flows from the mineral sector<sup>51</sup>. The Africa Mining Vision also upholds the principle of Free, Prior and Informed Consent (FPIC) for mining-affected communities, and stipulates measures to address the social and environmental impacts of mining<sup>52</sup>. The Africa Mining Vision identifies opportunities that can accelerate benefits from the mining industry in Africa including the use of resource rents, upscaling physical infrastructure, downstream value addition, upstream value addition and technology and product development<sup>53</sup>.

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<sup>45</sup> Ibid

<sup>46</sup> Ibid

<sup>47</sup> Ibid

<sup>48</sup> Ibid

<sup>49</sup> Ibid

<sup>50</sup> Ibid

<sup>51</sup> Ibid

<sup>52</sup> Ibid

<sup>53</sup> Africa Union., 'Africa Mining Vision.' Op Cit

The Africa Mining Vision is very integral in enhancing sustainable mining in Africa. It acknowledges that effective management of the mineral resources in the continent is critical to transform the sector in a sustainable manner<sup>54</sup>. Realizing the ideal of the Africa Mining Vision is essential in promoting sustainable mining in Africa.

*Agenda 2063*<sup>55</sup> also embraces the concept of sustainable mining and calls for the implementation of the Africa Mining Vision in order to realize this ideal in Africa. Agenda 2063 represents a shared strategic framework for inclusive growth and sustainable development and a global strategy to optimize the use of Africa's resources for the benefit of all Africans<sup>56</sup>. It stipulates the importance of African and international initiatives for better governance in the mining sector and the extractive industry<sup>57</sup>. According to Agenda 2063, Africa's natural resources need to be governed effectively to foster transparency and counter illicit resource outflows and unacceptable exploitation of Africa's natural resources<sup>58</sup>. In this regard, Agenda 2063 calls upon the African Union (AU) member states to fully implement the Africa Mining Vision<sup>59</sup>. Actualizing Agenda 2063 can therefore fast track the implementation of the Africa Mining Vision and realization of sustainable mining in Africa.

The *Mining Act*<sup>60</sup> of Kenya also embraces the aspect of sustainable mining. The Act enshrines sustainable development as one of the guiding principles in developing the mining sector in Kenya<sup>61</sup>. It also advocates for the development of the mining sector in Kenya in a manner which promotes compliance with international conventions and national policies relating to the sustainable development of the mineral resources and

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<sup>54</sup> United Nations Economic Commission for Africa., 'Africa Mining Vision Guidelines.' Op Cit

<sup>55</sup> Africa Union., 'Agenda 2063: The Africa we Want.' Available at [https://au.int/sites/default/files/documents/33126-doc-framework\\_document\\_book.pdf](https://au.int/sites/default/files/documents/33126-doc-framework_document_book.pdf) (Accessed on 03/10/2023)

<sup>56</sup> Ibid

<sup>57</sup> Ibid

<sup>58</sup> Ibid

<sup>59</sup> Ibid

<sup>60</sup> Mining Act, No. 12 of 2016, Laws of Kenya, S 20 (1) (o)

<sup>61</sup> Ibid, S 5

ensures that mining operations take into account local and community values<sup>62</sup>. It further calls upon mining entities to promote sustainable use of land through restoration of abandoned mines and quarries<sup>63</sup>. The Mining Act therefore embraces the concept of sustainable mining by enshrining measures to ensure the protection of the environment, community development, safety of prospecting and mining operations and health and safety of persons undertaking those operations among others<sup>64</sup>.

Sustainable mining is thus vital in Africa. There has been increased demand on the mining industry to adopt more environmentally and socially responsible practices in Africa<sup>65</sup>. It has been pointed out that with shareholders and lenders demanding greenhouse gas emissions and pollution reduction, plus improvements in worker and community welfare, there is a growing belief that it is in the mining industry's best interests to adopt more responsible practices to increase productivity and avoid adverse publicity<sup>66</sup>. As a result of these concerns, private and public sector led mining activities across Africa have begun to prioritize sustainable techniques to promote environmental sustainability, social responsibility, and good business practices<sup>67</sup>. In turn, the sustainable mining industry has become an increasingly attractive investment opportunity for global players seeking to enhance their returns on investment while spearheading climate protection and resilience<sup>68</sup>. Sustainable mining can unlock economic and social development in Africa while fostering environmental conservation and confronting the threat of climate change<sup>69</sup>.

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<sup>62</sup> Ibid

<sup>63</sup> Ibid, S 179 (a)

<sup>64</sup> Ibid, S 42

<sup>65</sup> Ford. N., 'Can African Mining ever be Sustainable?' Available at <https://african.business/2022/04/energy-resources/can-african-mining-ever-be-sustainable> (Accessed on 03/10/2023)

<sup>66</sup> Ibid

<sup>67</sup> Africa Business., 'African Sustainable Mining Piques Interest of Global Players.' Available at <https://african.business/2023/09/apo-newsfeed/african-sustainable-mining-piques-interest-of-global-players#:~:text=While%20clean%2Denergy%20mines%20are,large%2Dscale%20projects%20in%20South> (Accessed on 03/10/2023)

<sup>68</sup> Ibid

<sup>69</sup> Ibid

However, several problems hinder the realization of the ideal of sustainable mining in Africa. It has been pointed out that growth in Africa's mineral-rich countries is slipping, and inequality and economic fragility are on the rise<sup>70</sup>. Further, many African countries are under pressure to enter into unfair mining deals and contracts with foreign companies, and to hand out tax incentives to such companies a situation that ends up hurting them in the long term<sup>71</sup>. Despite boasting vast mineral wealth, the mining industry in Africa has spawned gloomy tales of the natural resource curse phenomenon<sup>72</sup>. In Africa, mineral resources are extracted mainly for processing and use outside the continent, and mineral sectors have remained an enclave and disconnected from broader economies<sup>73</sup>. It has been shown that public debt and fiscal stress is rising in several mineral-rich African countries such as Nigeria, Zambia, Angola and Mozambique<sup>74</sup>. Further, Angola, Democratic Republic of the Congo (DRC) and Nigeria are good examples of African countries well-endowed in natural resources that suffer widespread poverty<sup>75</sup>. There has also been prevalence of conflicts linked to natural resources in countries such as DRC<sup>76</sup>.

From the foregoing, it is evident that Africa is yet to harness the full potential of its mineral endowments for sustainable and inclusive development. The continent is richly endowed with a variety of mineral resources, with potential for economic growth and development but performance so far has not been consistent with expectations<sup>77</sup>. There is need to embrace sustainable mining in Africa in order to unlock growth and prosperity in Africa.

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<sup>70</sup> Oxfam., 'From Aspiration to Reality: Unpacking the Africa Mining Vision.' Available at <https://www-cdn.oxfam.org/s3fs-public/bp-africa-mining-vision-090317-en.pdf> (Accessed on 03/10/2023)

<sup>71</sup> Ibid

<sup>72</sup> Ibid

<sup>73</sup> Ibid

<sup>74</sup> Henri. A., 'Natural Resources Curse: A Reality in Africa.' *Resources Policy*, Volume 63, 2019

<sup>75</sup> Ibid

<sup>76</sup> Ibid

<sup>77</sup> United Nations Economic Commission for Africa., 'Africa Mining Vision Guidelines.' Op Cit

#### **4.0 Way Forward**

Several measures are required in order to embrace sustainable mining in Africa.

There is need to actualize the Africa Mining Vision. The Vision is integral in transforming the mining sector in Africa and promoting sustainable mining<sup>78</sup>. African countries should therefore accelerate the implementation of the African Mining Vision in order to realize sustainable mining in Africa<sup>79</sup>. Some of the measures that are required in order to implement the Vision include aligning mineral sector laws, policies and institutions with the African Mining Vision, raising awareness about the Vision among stakeholders in the mining sector and ensuring that companies operating in Africa's mineral sector institute policies that comply with the provisions of the Vision on aspects such as human rights, corporate accountability, gender justice, social and environmental impacts<sup>80</sup>.

In addition, there is need to adopt sound labour practices in the mining sector in order to realize sustainable mining<sup>81</sup>. Challenges such as death, injury and disease among the world's mineworkers remain high, and mining remains the most hazardous occupation when the number of people exposed to risk is taken into account<sup>82</sup>. These challenges hinder the realization of sustainable mining. Therefore in order to achieve sustainable mining, there is need to foster sound labour practices including good safety standards and paying workers a fair wage<sup>83</sup>. Further, there is need to invest in the tools, equipment and training needed to safeguard workers in the mining sector as much as possible<sup>84</sup>.

It is also imperative for mining companies to embrace community participation and engagement while undertaking mining activities<sup>85</sup>. Public participation is one of the

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<sup>78</sup> World Bank., 'Africa Mining Vision and Country Mining Visions.' Available at [https://www.worldbank.org/content/dam/Worldbank/Event/Africa/Ethiopia%20Extractive%20Industries%20Forum%202014/9\\_AMV.pdf](https://www.worldbank.org/content/dam/Worldbank/Event/Africa/Ethiopia%20Extractive%20Industries%20Forum%202014/9_AMV.pdf) (Accessed on 04/10/2023)

<sup>79</sup> Ibid

<sup>80</sup> Oxfam., 'From Aspiration to Reality: Unpacking the Africa Mining Vision.' Op Cit

<sup>81</sup> International Labour Organization., 'Mining (Coal; other Mining) Sector.' Op Cit

<sup>82</sup> Ibid

<sup>83</sup> Sammour. J., 'What Exactly is Ethical Mining?.' Op Cit

<sup>84</sup> Ibid

<sup>85</sup> Muigua. K., 'Maximising the Right to Free, Prior, and Informed Consent for Enhanced Environmental Justice in Kenya.' Op Cit

fundamental principles of governance that is recognized worldwide and has been enshrined under the Constitution of Kenya<sup>86</sup>. Public participation is believed to be important in bridging the gap between the government, civil society, private sector and the general public, building a common understanding about the local situation, priorities and programmes as it encourages openness, accountability and transparency, and is thus at the heart of inclusive decision-making<sup>87</sup>. Further, public participation can improve the quality of decision-making in the mining sector by providing decision-makers with additional, unique information on local conditions<sup>88</sup>. Public participation and community engagement can be realized in the mining sector through FPIC<sup>89</sup>. The global call for application of FPIC in mining is generally meant to address the abuse of the rights of indigenous peoples worldwide including: indigenous land rights, recognition of and respect for culture, the right to economic participation, to a livelihood and to a clean environment, among others<sup>90</sup>. It is therefore vital to foster community engagement by obtaining the consent of local communities at all stages in the lifecycle of a mine from mineral right application to the closure and rehabilitation of the mining sites<sup>91</sup>.

Sustainable mining can also be realized in Africa through the adoption of CSR by mining companies<sup>92</sup>. The mining sector has been described as one of the most controversial industries in the sense that, at the same time that it is beneficial to society,

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<sup>86</sup> Constitution of Kenya, 2010., Article 10 (2) (a), Government Printer, Nairobi

<sup>87</sup> Muigua. K., 'Towards Meaningful Public Participation in Natural Resource Management in Kenya.' Available at <http://kmco.co.ke/wp-content/uploads/2018/08/TOWARDSMEANINGFUL-PUBLICPARTICIPATION-IN-NATURAL-RESOURCEMANAGEMENT-IN-KENYA.pdf> (Accessed on 04/10/2023)

<sup>88</sup> Cerezo. L, & Garcia. G., 'Lay Knowledge and Public Participation in Technological and Environmental Policy.' Available at <https://scholar.lib.vt.edu/ejournals/SPT/v2n1/pdf/CEREZO.PDF> (Accessed on 04/10/2023)

<sup>89</sup> Muigua. K., 'Maximising the Right to Free, Prior, and Informed Consent for Enhanced Environmental Justice in Kenya.' Op Cit

<sup>90</sup> Ibid

<sup>91</sup> Mathiba. G., 'The Incorporation of the FPIC Principle in South African Policy on Mining-Induced Displacements.' Op Cit

<sup>92</sup> Majer. M., 'The Practice of Mining Companies in Building Relationships with Local Communities in the Context of CSR Formula.' Op Cit

it can also be a threat to it<sup>93</sup>. It is therefore vital for mining companies to establish and maintain a good relationship with indigenous, local, and societal groups in order to avoid losing their Social License to Operate (SLO)<sup>94</sup>. Mining companies should therefore embrace CSR through the inclusion of social interests, environmental protection and a relationship with local community groups in the company strategies<sup>95</sup>. Mining companies can therefore foster sustainable mining by embracing CSR practices including investments in public services and infrastructure, contributions to local agriculture and other economic activities, as well as payments to support the cultural or political activities of communities in mining areas<sup>96</sup>.

Finally, it is very important to for mining companies to embrace the ideal of Sustainable Development. Sustainable Development has been defined as development that meets the needs of the present without compromising the ability of future generations to meet their own needs<sup>97</sup>. It combines elements such as environmental protection, economic development and social concerns<sup>98</sup>. It has been pointed out that since the mining industry's operations have the potential to impact a wide range of environmental and socioeconomic entities, it is imperative for them to embrace Sustainable Development by ensuring improved environmental performance and addressing the needs of stakeholders and community groups from the onset throughout the lifetime of the mining process<sup>99</sup>. Sustainable Development can be realized in the mining sector through several approaches including reducing, reusing and rethinking mining waste, promoting water conservation, lowering carbon emissions by transitioning to renewable energy, ensuring

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<sup>93</sup> Yousefian. M et al., 'Corporate Social Responsibility and Economic Growth in the Mining Industry.' *The Extractive Industry and Society*, Volume 13, 2023

<sup>94</sup> Ibid

<sup>95</sup> Majer. M., 'The Practice of Mining Companies in Building Relationships with Local Communities in the Context of CSR Formula.' Op Cit

<sup>96</sup> Ibid

<sup>97</sup> World Commission on Environment and Development., 'Our Common Future.' Oxford, (Oxford University Press, 1987)

<sup>98</sup> Fitzmaurice. M., 'The Principle of Sustainable Development in International Development Law.' *International Sustainable Development Law.*, Vol 1

<sup>99</sup> Hilson, G., & Murck. B., 'Sustainable Development in the Mining Industry: Clarifying the Corporate Perspective.' *Resources Policy*, Volume 26, Issue 4



the long term well-being of local communities, restoring land to its natural state and combatting illegal mining and its impact and communities and the environment<sup>100</sup>.

The foregoing measures are integral in embracing sustainable mining in Africa.

## **5.0 Conclusion**

Mining is an important industry that contributes significantly to the global economy. However, despite its importance as an economic activity, mining and subsequent processing of strategic elements can result in environmental, social and economic concerns<sup>101</sup>. Sustainable mining has therefore emerged as an ideal that seeks to optimize environmental performance and social impact of mining activities<sup>102</sup>. The *Africa Mining Vision*<sup>103</sup> seeks to achieve the ideal of sustainable mining in Africa. However, problems in the mining sector in Africa and slow implementation of the African Mining Vision have hindered realization of sustainable mining in Africa<sup>104</sup>. Sustainable mining can be embraced in Africa by actualizing the Africa Mining Vision, adopting sound labour practices, embracing community participation and engagement, adoption of CSR activities and fostering Sustainable Development<sup>105</sup>. Embracing sustainable mining in Africa is an ideal worth pursuing.

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<sup>100</sup> Pan African Resources., 'Sustainable Mining.' Op Cit

<sup>101</sup> Massachusetts Institute of Technology., 'The Future of Strategic Natural Resources.' Op Cit

<sup>102</sup> Pan African Resources., 'Sustainable Mining.' Op Cit

<sup>103</sup> Africa Union., 'Africa Mining Vision.' Op Cit

<sup>104</sup> Oxfam., 'From Aspiration to Reality: Unpacking the Africa Mining Vision.' Op Cit

<sup>105</sup> Ibid

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