## ASSESSING NIGERIA'S LEGAL FRAMEWORK FOR ENVIRONMENTAL PROTECTION IN THE ARTISANAL AND SMALL-SCALE MINING SECTOR

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### Abstract

Despite a robust legal framework, Nigeria's abundant solid minerals sector is plagued by massive environmental degradation and catastrophic pollution, challenging the efficacy of the regime in regulating the informal Artisanal and Small-Scale Mining (ASM) sector. This, this paper critically assesses whether Nigeria's existing legal framework for environmental protection in the solid minerals sector is truly proactive, examining both its theoretical design and its practical implementation. The study employs a doctrinal and comparative approach, critically analysing key statutory provisions, and institutional mechanisms, while drawing insights from the decentralised and progressive ASM governance model of Ethiopia. The findings indicate that, while the legal framework contains laudable, proactive provisions on paper, it is rendered largely reactive in practice. This failure stems from systemic implementation gaps, institutional inertia, vague regulatory language, and the poor formalisation of the ASM sector dominated by unlicensed, illegal miners. Furthermore, the non-justiciability of constitutional environmental rights weakens citizens' ability to seek redress. To achieve meaningful, preventative environmental protection, Nigeria must urgently transition from its current reactive approach to a proactive, inclusive, and environmentally sustainable legal regime. The paper therefore advocates for: constitutional reform to make environmental rights justiciable; regulatory revision to eliminate ambiguous enforcement language; the adoption of a decentralized formalisation strategy inspired by the Ethiopian model; and enhanced, multisectoral stakeholder collaboration for effective oversight.

**Keywords:** Artisanal and Small-Scale Mining (ASM), Environmental Degradation, Legal Framework, Solid Minerals, Sustainable Development Goals (SDGs).

### 1.0. Introduction

The abundance of solid mineral resources across many states in Nigeria comes at a devastating environmental cost. As an author aptly observes, the environment serves as the natural platform for all resource endowments, making the exploitation of natural resources inherently intertwined with environmental degradation.

<sup>1</sup> According to the National Bureau of Statistics, there are over 40 types of minerals in Nigeria.<sup>2</sup> Even though, majority of solid minerals in Nigeria are still untapped, the sector contributes to 0.63% of Nigeria's Gross Domestic Profit.<sup>3</sup> However, the environmental consequences of mineral exploitation are glaring. In 2000, the illegal mining of lead in Zamfara State caused a catastrophic lead poisoning which claimed the lives of 400 children.<sup>4</sup> There are also risks of water contamination in Enugu due to the mining of coal, while constant air pollution caused by limestone quarrying causes serious hazards to the inhabitants of Ewekoro, and Shagamu in Ogun State.<sup>5</sup> Notably, over 95% of mining activities in Nigeria are conducted illegally by small-scale and artisanal miners, whose operations pose severe environmental and public health risks to local communities.<sup>6</sup> <sup>7</sup> The reality is that this problems largely stems the prevalence of Artisanal and Small Scale

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<sup>&</sup>lt;sup>1</sup> Yemi Oke, *Nigerian Energy and Petroleum, Oil and Gas, Cases and Practice and Theories* (Princeton & Associates Publishing Company Limited 2019) pp. 627-628

<sup>&</sup>lt;sup>2</sup>National Bureau of Statistics, 'Mineral Production Statistics 2019-2020.' (2020) <a href="https://nigerianstat.gov.ng/elibrary/read/1241100">https://nigerianstat.gov.ng/elibrary/read/1241100</a>> accessed 20 May 2024.

<sup>&</sup>lt;sup>3</sup> Orji Ogbonaya Orji, 'Highlights of 2021 Solid Minerals Industry Report' (2021) <a href="https://eiti.org/sites/default/files/2024-01/summary%202021-SM-PRESENTATION-1.pdf">https://eiti.org/sites/default/files/2024-01/summary%202021-SM-PRESENTATION-1.pdf</a> accessed May 20, 2025.

<sup>&</sup>lt;sup>4</sup> Ahmed Ali, Amina Abdullahi, Aminu Zangina, 'Environmental Issues and the Prospects of Mining in Nigeria.' (2018). Dutse Journal of Pure and Applied Sciences, 4(2), pp.531-539. <a href="https://123pdf.org/document/zwvw3mj7-environmental-issues-prospects-mining-nigeria.html">https://123pdf.org/document/zwvw3mj7-environmental-issues-prospects-mining-nigeria.html</a> accessed 20 May 2025.

<sup>&</sup>lt;sup>5</sup> ibid.

<sup>&</sup>lt;sup>6</sup> Jean de Dieu Izerimana, and Lakube Godwin, 'Opportunity, and Side Effects of Artisanal and Small-Scale Mining In Nigeria.' [2024]. *Modern Economy* 15, no. 3. <a href="https://doi.org/10.4236/me.2024.153012">https://doi.org/10.4236/me.2024.153012</a> Accessed June 20, 2024.

<sup>&</sup>lt;sup>7</sup>Premium Times, 'Nigeria Identifies 1, 200 Abandoned Mining Sites.' (6 April 2014). https://www.premiumtimesng.com/news/158188-nigeria-identifies-1200-abandoned-mining-sites.html?tztc=1. accessed 20 May 2025.

Mining (ASM).<sup>8 9</sup> ASM is often conducted by individuals, families, and communities for subsistence, making it difficult for regulators to monitor and control. These operations typically occur covertly, outside the purview of legal oversight, and are resistant to formalisation due to historical marginalisation, lack of awareness, bureaucratic barriers, and socio-economic dependencies.<sup>10</sup>

This troubling situation runs counter to the spirit of Sustainable Development Goals (SDG) such as: Good Health and Well-being, Sustainable Cities and Communities, and Climate Action. What is particularly concerning is that these environmental harms persist despite the existence of an ostensibly robust legal framework. This raises a critical question: is Nigeria's legal framework for environmental protection in the solid minerals sector inherently incapable of preventing unsustainable practices, or does the failure lie in its implementation? This is the critical question which this paper seeks to answer.

This paper unfolds into five main sections: The introduction highlights the environmental cost of Nigeria's solid mineral wealth, posing the core question of legal effectiveness. The second section explores the causes of environmental degradation, linking it to the dominance of illegal artisanal and small-scale mining. The third section provides a critical analysis of Nigeria's legal and regulatory framework, assessing key constitutional, statutory, and institutional instruments. The fourth section offers detailed recommendations based on international best practices, particularly Ethiopia's ASM reforms, and proposes actionable reforms for Nigeria. The article concludes by reiterating the urgent need for a proactive legal regime that can sustainably regulate the mining sector and protect affected communities.

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<sup>&</sup>lt;sup>8</sup> Magaji, S., Shehu. I. A., Barau, H. I., & Musa, M. R., (2025). Resource governance: Examining Laws Regulating Mining of Mineral Resources in Nigeria with Emphasis on Gold Mining and Its Effect on the Security of Life and Environment. *International Journal of Intellectual Discourse*, 8(3), p.110.

<sup>&</sup>lt;sup>9</sup> Section 164 of the Minerals and Mining Act defines small scale mining as artisanal, alluvial and other forms of mining operations involving the use of low level technology or application of methods not requiring substantial expenditure for the conduct of Mining Operations. It defines artisanal mining as mining operations limited to the use of non-mechanised operations. Thus, any form of ASM carried out without a licence or authority is illegal pursuant to Section 2 of the Act.

<sup>10</sup> ibid.

### 2.0. The Nigerian Solid Mineral Mining Sector, nd Environmental Degradation

### 2.1. The Problem, and the Cause

Due to the inherently destructive nature of mining activities in Nigeria, inhabitants of communities where mining activities take place have always had to grapple with damages to their environment, and farmland. Section 164 of the Minerals and Mining Act 2007<sup>11</sup> (hereinafter referred to as MMA) defines mining as the mining of minerals and any other operations directly or indirectly incidental thereto, including the processing of minerals. Nigeria is blessed with large deposits of solid minerals which have attracted both the formal, and informal sectors, ushering both legal, and illegal ways of mining solid minerals.<sup>12</sup> Unfortunately, this industry is underdeveloped, and largely dominated by informal miners operating outside the regulatory framework.

In contrast to the oil and gas industry, the solid minerals sector has long suffered from governmental deprioritisation, resulting in weak policy formulation and a lack of robust institutional oversight. For instance, a study of 37 mining sites across ten communities in Ijesaland, Southwest Nigeria, revealed 354 mining pits degrading lands in the communities.<sup>13</sup> Moreover, recurring hazards frequently emanate from mine sites, particularly in areas such as Jos, Plateau State, where thousands of abandoned and open mines contribute to the contamination of water sources and air pollution, resulting in both airborne and waterborne diseases, as well as harm to local flora and fauna.<sup>14</sup> Besides the foregoing, the adverse implications of this situation on human rights to a clean, healthy, and sustainable environment is enormous. As Professor Yemi Oke aptly observes, a

<sup>12</sup> Merem, E.C., Twumasi, Y., Wesley, J., Isokpehi, P., Shenge, M., Fageir, S., Crisler, M., Romorno, C., Hines, A., Hirse, G. and Ochai, S., 'Assessing the Ecological Effects of Mining in West Africa: The Case of Nigeria.' (2017). *International Journal of Mining Engineering and Mineral Processing*, 6(1), pp.1-19. <a href="http://article.sapub.org/10.5923.j.mining.20170601.01.html">http://article.sapub.org/10.5923.j.mining.20170601.01.html</a> accessed 1 May, 2025

 $<sup>^{\</sup>rm 11}$  Cap. 162, Laws of the Federation of Nigeria, 2004.

<sup>&</sup>lt;sup>13</sup> Nathaniel Olugbade Adeoye, 'Land Degradation in Gold Mining Communities of Ijesa Land, Osun State, Nigeria.' (2016) *Geo-Journal* 81, pp. 535-554. <a href="https://doi.org/10.1007/s10708-015-9630-x">https://doi.org/10.1007/s10708-015-9630-x</a>. <a href="https://doi.org/10.1007/s10708-015-9630-x">accessed 1</a> June 2025

<sup>&</sup>lt;sup>14</sup> Oruonye, E.D., Musa, D.G., Bombom, L.S., Anger, R.T., Ahmed, Y.M., Ezekiel, B.B., Angye, G.F. and Emmanuel, J., 'The Nexus between Unsustainable Mining, Livelihood and Environmental Degradation: A Case of Tin and Columbite Mining on Jos Plateau Nigeria.' (2024) *GPH-International Journal of Social Science* and Humanities Research, 7(02), pp.01-12. <a href="https://gphjournal.org/index.php/ssh/article/view/1223/889">https://gphjournal.org/index.php/ssh/article/view/1223/889</a> accessed 1 June 2025.

degraded and polluted environment poses a serious threat to human existence and could render the earth uninhabitable if effective environmental control measures are not implemented.<sup>15</sup>

Moreover, in *SERAP v Federal Republic of Nigeria*<sup>16</sup> the ECOWAS Court of Justice held stated that:

The quality of life of people is determined by the quality of the environment. But the government has failed in its duty to maintain a general satisfactory environment conducive to the development of the Niger Delta region.

Thus, it is settled that the violation of rights relating to the environment causes a ripple effect, leading to indirect violations of other human rights, especially the right to life, and dignity of human person.<sup>17</sup> What then, is the main genesis of environmental degradation in the solid mineral mining industry?

The problem is chiefly attributed to the prevalence of illegal, unsupervised and unregulated artisanal and small-scale mining of solid minerals in Nigeria. For instance, 95% of gold is mined illegally in Nigeria, often with crude methods, leaving large footprints of environmental degradations. This situation has remained unimproved for decades, even though the Minerals, and Mining Act 2007 prohibits illegal, and unauthorised exploration of minerals. Despite the prohibition, institutional oversight is weak, and there is gross negligence on the part of the government. Besides, unlike the regulatory approach to the oil, and gas sector, the solid minerals mining sector is largely abandoned in terms of enforcement, hence the continued environmental degradation, and regulatory failure. Due to this long-term negligence across board, the government is

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<sup>&</sup>lt;sup>15</sup> (n 1) p. 627

<sup>&</sup>lt;sup>16</sup> General List No. ECW/CCJ/APP/08/09, Judgment No. ECW/CCJ/JUD/18/12

<sup>&</sup>lt;sup>17</sup> Gbemre v Shell PDC Ltd (FHC/B/ CS/53/2005).

<sup>&</sup>lt;sup>18</sup> Olujobi, O.J, and Irumekhai O.S., 'Strategies, and Regulatory Measures for Combating Illicit Mining Operations in Nigeria: A Comprehensive Legal Perspective.' (2024) *Resources Policy*, 88, p.104459 <sup>19</sup> (n 4)

<sup>&</sup>lt;sup>20</sup> (n 8)

<sup>&</sup>lt;sup>21</sup> Section 2.

<sup>&</sup>lt;sup>22</sup> (n 14)

now faced with the reclamation of abandoned mine lands, and reducing hazards that could have been prevented in the first place.<sup>23</sup>

Thus, in light of the foregoing, it is imperative to examine the existing legal framework and its implementation, its adequacy, and otherwise, for the purpose of finding a sustainable solution.<sup>24</sup>

# 3.0. Critical Analysis of the Legal, and Regulatory Framework Governing Asm in Nigeria

This section evaluates the adequacy and effectiveness of Nigeria's legal and regulatory instruments in addressing the environmental implications of artisanal and small-scale mining (ASM). While the country boasts a wide array of laws and policies aimed at environmental protection, the realities of enforcement and the dominance of informal mining reveal fundamental gaps that weaken proactive legal responses.

### 3.1. The Constitution, and the African Charter

The starting point of any legal discourse in Nigeria is the Constitution of the Federal Republic of Nigeria, 1999 (hereinafter referred to as "the Constitution"). Thus, what are the relevant constitutional provisions the regulation of solid minerals mining in Nigeria, and environmental degradation?

Section 20 of the Constitution provides that the 'State shall protect, and improve the environment, and safeguard the water, air, and land, forest, and wild life of Nigeria.' Incidental to this is Section 14 (2) (b) which provides that the security, and welfare of the

<sup>&</sup>lt;sup>23</sup> Oruonye, E.D., Musa, D.G., Bombom, L.S., Anger, R.T., Ahmed, Y.M., Ezekiel, B.B., Angye, G.F. and Emmanuel, J., 'The Nexus between Unsustainable Mining, Livelihood and Environmental Degradation: A Case of Tin and Columbite Mining on Jos Plateau Nigeria.' (2024). *GPH-International Journal of Social Science* and Humanities Research, 7(02), pp.01-12. <a href="https://gphjournal.org/index.php/ssh/article/view/1223/889">https://gphjournal.org/index.php/ssh/article/view/1223/889</a> accessed 23<sup>rd</sup> May, 2025.

<sup>&</sup>lt;sup>24</sup> Laniyan, T.A., Kolawole, T.O. and Kenjinu, S.S., 'Environmental Assessment of Artisanal Gold Mining on Soils of a Community within Southwestern, Nigeria.' (2024) <a href="https://doi.org/10.21203/rs.3.rs-3875505/v1">https://doi.org/10.21203/rs.3.rs-3875505/v1</a>>accessed 23rd. May 2025

people shall be the primary purpose of the government. Also instructive is Section 13 of the Constitution which provides that:

It shall be the duty, and responsibility of all organs of government, and of all authorities, and persons, exercising legislative, executive or judicial powers, to conform to, observe, and apply the provisions.

On paper, these provisions are laudable, and they provide a solid foundation for government's power, and duties in preventing environmental degradation that may be caused by inherently-destructive mining activities in Nigeria. However, in practice, the provisions have been rendered toothless, and incapable of enforcement by Section 6 (6) C of the same Constitution which provides that all provisions in Chapter II of the Constitution<sup>25</sup> are not justiciable. This anomaly has been given judicial stamp in *Archbishop Olubunmi Okogie v Attorney General of Lagos State*, where the Court held that no Court in Nigeria, has jurisdiction to determine any question as to whether any organ of government has acted or is acting, in compliance with the Fundamental Objective, and Directive Principles of State Policy.

It is submitted that the situation of inhabitants of communities marred by destructive mining activities is made more precarious, and difficult to remedy due to the non-justiciability of Section 20 of the Constitution. Even though, the Section uses the word 'shall' which seems to indicate that the provision is mandatory,<sup>27</sup> the natural effect of the word has been watered down by its non-justiciability. Human rights are fundamental, and above the political society itself.<sup>28</sup> Moreover, since violations of right to a peaceful, healthy, and environment indirectly affects other fundamental human rights, it is only sensible to make the state's obligation to 'protect, and improve the environment, and safeguard the water, air, and land, forest' justiciable by communities suffering from the environmental degradation. Skeptics may argue that there are laws, and regulations to

<sup>27</sup> Corporate Ideal Insurance v Ajaokuta Steel Company Limited Ltd & Ors [2014] 7 NWLR (Pt. 1405) 165.

<sup>&</sup>lt;sup>25</sup> The Fundamental Objectives, and Directive Principles of State Policy, of which Sections 20, 13, and 14 (2) B are a part.

<sup>&</sup>lt;sup>26</sup> (1981) 2 NCLR 337

<sup>&</sup>lt;sup>28</sup> Kayode Eso JSC in Ransome-Kuti v AG Federation [1985] 2 NWLR (Pt. 6) 211 at 229-231

achieve the environmental objectives.<sup>29</sup> However, regulatory enforcement demonstrates a consistent pattern of institutional inertia and reliance on *ex post facto* interventions.<sup>30</sup>

Moreover, since the Constitutions is the *fons et erigo*, the grundnorm, and the source to which every rule of law or government action must trace its validity, it is an aberration that the Nigerian Constitution does not recognise, as a fundamental human right, the right of communities to a healthy, safe, and sustainable environment, which is directly enforceable against the government. This is at variance with the position in the international community as reflected in the inclusion of Good Health, and Well-being, Sustainable Cities, and Communities, and Climate Action as part of the SDGs. Moreover, judicial decisions, Constitutions of countries, regional, and international treaties have recognised the right to a safe, healthy, clean, and sustainable environment as a fundamental human right. This movement is known as environmental constitutionalism or green constitutionalism.<sup>31</sup> For instance, the Supreme Court of Philippines held in *Juan* Antonio Oposa v The Honourable Fulgencio Factorian<sup>32</sup> that environmental rights need not even be written in the constitutions because they are so fundamental that, just like other civil, and political rights, they must be deemed to be in existence from the inception of mankind. It is however, submitted that in the context of Nigeria's legal system, human rights must be guaranteed by the Constitution to be capable of enforcement.<sup>33</sup> Also, in General Sanni Abacha v Gani Fawehinmi, 34 the Court of Appeal held that the right to a satisfactory environment, entrenched in Articles 24, and 21 of the African Charter is a human right. Thus, since the Charter has been domesticated in Nigeria pursuant to Section 12 of the Constitution, the individual rights contained therein are justiciable in Nigeria. Furthermore, Section 24 of South African Constitution 1996 provides for the right of everyone to: an environment that is not harmful to health or well-being; to have the environment protected through reasonable legislative means; to prevent pollution and

<sup>&</sup>lt;sup>29</sup> As will be shown later.

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<sup>&</sup>lt;sup>31</sup> Theodore Okonkwo, 'Environmental Constitutionalism in Nigeria: Are We There Yet?' (2015). *The Nigerian Juridical Review* Vol. 13: 175-216

<sup>&</sup>lt;sup>32</sup> (1994) 33 ILM 173, 187.

<sup>&</sup>lt;sup>33</sup> Under Chapter IV of the Constitution.

<sup>&</sup>lt;sup>34</sup> (1996) 9 NWLR Pt 475, p. 710.

ecological degradation *inter alia*. More laudable is the fact that unlike the situation in Nigeria, Section 38 of South African Constitution confers locus standi on affected persons to enforce claims under Section 24. Furthermore, Chapters Four, Five, the Fourth and Fifth Schedule of the Kenyan Constitution also make provisions for the environmental rights and enforcement mechanisms.

Unlike the Constitution, the African Charter on Human, and People's Rights recognises environmental rights under Article 24 as a fundamental human right, enforceable in Nigeria<sup>35</sup> there are challenges to its enforcement in Nigeria. In *Abacha v Fawehinmi*, the Court held that its provisions are enforceable, and applicable in Nigeria, just like the provisions of other domestic statutes. However, there are uncertainties regarding the enforcement of Article 24 in light of its potential conflict with Section 6(6)(c) of the Constitution. Evidently, any provision of the African Charter which is inconsistent to the provisions of the Constitutions shall be void to the extent of its inconsistency.<sup>36</sup> Put simply, socio-economic rights under the African Charter may be incapable of enforcement in Nigeria since they are non-justiciable under the Constitution. What then is the way out?

Due to these limitations, courts have adopted indirect methods to enforce environmental rights. One approach is to link environmental degradation to violations of the right to life or dignity under Chapter IV of the Constitution.<sup>37</sup> In *Centre for Oil Pollution Watch v Nigerian National Petroleum Corporation*,<sup>38</sup> the Supreme Court held that the right to a clean and healthy environment is connected to the right to life, and a breach of the former is a breach of the latter. Another judicial strategy is to invoke justiciable provisions that reinforce Chapter II principles.<sup>39</sup> This is, in other words, taking advantage of the words 'Except as otherwise provided by this Constitution...' in Section 6(6)(c).<sup>40</sup> An example is Item 60 of the Exclusive Legislative List which confers power on the National Assembly

<sup>35</sup> Ibid.

<sup>&</sup>lt;sup>36</sup> Section 1 of the Constitution.

<sup>&</sup>lt;sup>37</sup> Gbemre v. Shell FHC/B/CS/53/05.

<sup>&</sup>lt;sup>38</sup> [2019] 5 NWLR (Pt. 1666) 518.

<sup>&</sup>lt;sup>39</sup> The Supreme Court in *Federal Republic of Nigeria v Alhaji Mika Anache & Others* (2004) 14 WRN 1 – 90 61.

<sup>40</sup> Ibid.

to make laws for the "establishment, and regulation of authorities for the Federation or any part thereof: to promote, and enforce the observance of the Fundamental Objectives, and Directive Principles" contained in the constitution. Thus, as held in *Attorney-General of Ondo State v. Attorney-General of the Federation & 35 Ors*, <sup>42</sup> unless the National Assembly makes a law to enforce any provision in Chapter II of the Constitution, such laws will remain non-justiciable.

### 3.2. The Nigerian Minerals, and Mining Act, 2007.

The Minerals, and Mining Act, 2007<sup>43</sup> (hereinafter referred to as MMA) is the principal legislation governing, and regulating the extractive, and mining industry in Nigeria. It includes numerous provisions aimed at environmental protection. The Act prohibits the exploration of minerals without authority, and provides for a licensing regime for all stages in mining. As identified above, environmental degradation in the solid minerals sector is traceable, chiefly to the activities of small-scale, and artisanal miners.<sup>44</sup> Thus, the bulk of critical analysis in this section will focus on regulatory provisions regarding small-scale, and artisanal mining.

Firstly, as a preventive measure, Section 3(1) C of the MMA 2007 provides that no mineral title granted under the Act shall authorise reconnaissance, exploration or exploitation of mineral resources in any land occupied by any town, village, market, *inter alia*. The Act also establishes a Mines Environmental Compliance Department to, among other things, enforce, and monitor compliance with environmental obligations, and requirements of mineral title holders.<sup>45</sup> Every holder of a mining lease is mandated to maintain the lease area, conduct mining operations in a safe manner,<sup>46</sup> and restore the

<sup>&</sup>lt;sup>41</sup> In the context of this paper, environmental rights.

<sup>&</sup>lt;sup>42</sup> [2002] 9 NWLR (Pt. 772) 222.

 $<sup>^{43}(</sup>n7)$ .

<sup>&</sup>lt;sup>44</sup> (n 15).

<sup>45</sup> Section 18.

<sup>46</sup> Section 70.

land where a mining operation has been, or is being carried out.<sup>47</sup> Moreover, all lease holders are mandated to carry out effective rehabilitation of the mined-out areas.<sup>48</sup>

The provision in Section 118, however deserves a critical examination. The section provides that:

Every holder of a mineral title under the Act shall, as far as it is reasonably practicable (a) minimise, manage, and mitigate any environmental impact resulting from activities carried out under this Act; and (b) rehabilitate, and reclaim, where applicable, the land disturbed, excavated, explored, mined or covered with tailings arising from mining operations to its natural or predetermined state...

This phrase seems to put the determination of when compliance with the section is practicable in the hands of miners of solid minerals. Moreover, it creates an unnecessary loophole of impracticability that could be used to justify non-compliance. Moreover, this vagueness fails to align with global best practice and the availability of modern remediation technologies. In contemporary international mining governance, the standard for environmental responsibility has shifted to mandatory performance standards, <sup>49</sup> often termed the Best Available Techniques (BAT). <sup>50</sup> The existence of established, cost-effective technologies for waste management, water treatment, and land reclamation renders the legislative reliance on a subjective measure of reasonable practicability academically anachronistic. Therefore, the provision effectively establishes a lower, reactive baseline for compliance rather than driving the sector toward a proactive commitment to environmental restoration that is achievable through current technological means.

<sup>49</sup> European Union (2018). Best Available Techniques (BAT) Reference Document for the Management of Waste from Extractive Industries, in accordance with Directive 2006/21/EC, pp. 487-599.

<sup>&</sup>lt;sup>47</sup> Sections 114, and 115.

<sup>&</sup>lt;sup>48</sup> Section 90 (2).

<sup>&</sup>lt;sup>50</sup> Zakondyrin, A., (2020). Best Available Techniques in Mining Industry: Topical Issues and Solution Methods. Mining Informational and Analytical Bulletin, pp. 55-64. < https://doi.org/10.25018/0236-1493-2020-61-0-55-64>

Moving forward, the Act mandates every holder of a mining lease to submit an environmental impact assessment, and an environmental protection, and rehabilitation program to the Mines, and Environmental Compliance Department.<sup>51</sup> Quite laudable is Section 121 which establishes an Environmental Protection, and Rehabilitation Fund to be managed by trustees, for the purpose of guaranteeing the environmental obligations of holders of mineral titles under the Act. Failure of any holder of a mining lease to pay into the Fund entitles the trustees to institute a court proceeding to recover the money, and the mining lease become liable to suspension.<sup>52</sup> Finally, Section 131 makes illegal mining of minerals, and the removal, possession, or disposal of any mineral, by any person, contrary to the provisions of the Act an offence. However, the wording of Section 133 which provides for punishment is unclear. The section imposes various punishments: revocation of licence, fine, and imprisonment on a 'mineral titleholder,' who is guilty of an offence under Section 131. Despite these commendable provisions, their impact on ASM remains minimal. Given that over 95% of ASM operations are informal and unlicensed, these sections have limited reach.<sup>53</sup>

From the foregoing, it is apparent that majority of the provisions of the MMA 2007 do not reflect the prevailing circumstances in the solid minerals mining sector. It appears that the drafters of the Act assumed that every miner of solid minerals will obediently apply for a mining lease, permits, or titles. Whereas, 95% of solid minerals miners operate outside the regulatory environment with no licence, and little to no government oversight. Consequently, there is a gross lack of compliance with provisions relating to the sustainable practices in the mining of solid minerals. While the Act attempts to formalise ASM through the creation of mineral buying centres and lease provisions, implementation has been weak as there is still an avalanche of illegal mine sites across the country.<sup>54</sup>

<sup>&</sup>lt;sup>51</sup> Sections 119 and 120.

<sup>&</sup>lt;sup>52</sup> Section 122.

<sup>&</sup>lt;sup>53</sup> (n 4).

<sup>&</sup>lt;sup>54</sup> Section 49 MMA, and Section 230 to 232 of the Mining Regulation 2011.

Moreover, while the Department of Artisanal and Small-Scale Mining (ASM) was established to regulate and promote environmentally sustainable practices in this sector, <sup>55</sup> its impact remains limited due to deeper legal, administrative, and knowledge barriers to effective regulation. Thus, many artisanal miners continue to operate informally due to a lack of awareness of legal requirements and the burdensome bureaucratic processes required for legalisation. <sup>56</sup> Communities with a long history of operating outside the formal sector may resist regulation, especially where there are few incentives to become formalised and where doing so would introduce tax obligations they currently avoid. <sup>57</sup> In some cases, weak political will, fuelled by corruption, hampers the development of a genuinely enabling legal environment for ASM regulation. <sup>58</sup> These challenges were confirmed in a 2023 policy study <sup>59</sup> by the Revenue Mobilisation Allocation and Fiscal Commission and development partners, which revealed that most ASMs operate without legal titles and outside official buying systems, leading to significant revenue losses and unsafe practices.

This combination of legal vagueness, administrative inertia, and policy conflict underscores the central thesis of this article: while Nigeria's legal framework appears proactive in theory, it remains fundamentally reactive in practice due to poor enforcement and institutional weaknesses.

### 3.3. The Environmental Impact Assessment Act

The Environmental Impact Assessment (EIA) Act aims to ensure that environmental considerations are integrated into project planning. It prohibits the commencement of projects without an approved EIA.<sup>60</sup> It also requires a written application for approval

<sup>&</sup>lt;sup>55</sup> Ministry of Solid Minerals Development, 'Artisanal & Small-Scale Mining – Ministry of Solid Minerals Development' (*Msmd.gov.ng*2024) <a href="https://msmd.gov.ng/artisanal-small-scale-mining/">https://msmd.gov.ng/artisanal-small-scale-mining/</a> accessed 20 June 2025.

<sup>&</sup>lt;sup>56</sup> (n 5)

<sup>&</sup>lt;sup>57</sup> ibid.

<sup>58</sup> ibid.

<sup>&</sup>lt;sup>59</sup> United Nations Development Programme, 'Transforming Nigeria's Artisanal and Small-Scale Mining Sector for Resource Mobilization and Sustainable Development' (2024) <a href="https://www.undp.org/nigeria/publications/transforming-nigerias-artisanal-and-small-scale-mining-sector-resource-mobilization-and-sustainable-development">https://www.undp.org/nigeria/publications/transforming-nigerias-artisanal-and-small-scale-mining-sector-resource-mobilization-and-sustainable-development</a> accessed 21 June 2025.

<sup>60</sup> Section 2.

before embarking on any project.<sup>61</sup> Section 13 identifies mining, quarrying, land reclamation, and waste disposal as activities requiring mandatory assessment,<sup>62</sup> *inter alia*. while Section 60 creates legal liability for contravention of any of the provisions in the Act.

While the Act is structurally comprehensive, its formal application to the ASM sector is profoundly challenging due to the illegal, unregulated, and informal nature of the activities, contributing to inadequate enforcement.<sup>63</sup> The key implementation barrier is the fundamental disconnect between the Act's rigorous, bureaucratic requirements and the realities of subsistence-based mining.<sup>64</sup> An artisanal miner, often operating covertly for daily survival,<sup>65</sup> has neither the financial capacity nor the technical expertise to prepare, submit, and secure a formal EIA. Furthermore, given that these operations are conducted outside the legal oversight system, there is no incentive or mechanism for such miners to voluntarily engage with a time-consuming and costly regulatory process designed for large, formal industrial projects. Consequently, the EIA framework, while providing mandatory protection on paper, remains practically irrelevant to the vast majority of environmentally damaging mining activities in Nigeria.

# 3.4. National Environmental Standards and Regulations Enforcement Agency (Establishment) Act, 2007

This Act established NESREA to protect and ensure sustainable environmental management. Also instructive are Regulations made under the NESREA such as: the National Effluent Limitation Regulations which regulates the treatment of effluent (waste water) being discharged by industries into the environment<sup>66</sup>; the National Environment Protection Regulations which regulates the use of chemicals and release of hazardous

<sup>62</sup> Third Schedule.

<sup>61</sup> ibid.

<sup>&</sup>lt;sup>63</sup> Environmental Law Institute, 'Artisanal and Small-Scale Mining in Nigeria: Recommendations to Address Mercury and Lead Exposure.' (2014) < nigeria-asgm-assessment-final-report.pdf> (accessed 20, June, 2025).

<sup>64</sup> ibid.

<sup>&</sup>lt;sup>65</sup> Magaji, et al., Resource governance (n 8).

<sup>&</sup>lt;sup>66</sup> Section 1 and 3(2)

substances into the environment;<sup>67</sup> and the Federal Solid Waste Management Regulations which regulates the discharge of any hazardous waste by any organization into the environment.<sup>68</sup> However, NESREA's capacity to enforce compliance among informal ASM operators remains limited.

### 3.5. National Extractive Industry Transparency Initiative (NEITI) Act.

The NEITI Act,<sup>69</sup> enacted in 2004, focuses on financial transparency and accountability in the extractive sector. 70 Thus, while it promotes good governance, its primary emphasis is on revenue reporting from formal sector actors. As such, it has limited relevance to the environmental regulation of ASM, which remains largely outside the formal economy. In a 2014 policy brief,<sup>71</sup> the Institute for Environmental Law reported that while NEITI has succeeded in improving transparency in the oil industry, its framework has not been extended to artisanal gold mining. This limited applicability is not surprising, given the Act's statutory scope. Section 21 of the NEITI Act defines an 'extractive industry' as a company engaged in prospecting, mining, extracting, processing, and distribution of minerals and gas, including any agency or body responsible for paying extractive proceeds to the relevant government authority. By explicitly defining the industry in terms of 'company' operations and revenue payments, the Act structurally excludes the vast majority of subsistence-based ASM operators, who are individuals or informal groups lacking corporate structure and formal revenue channels. This structural misalignment prevents the application of the Act's transparency standards to the informal sector, further contributing to the lack of oversight over their environmental practices.

The policy<sup>72</sup> brief also reported a recommendation by the Civil Society Legislative Centre (CISLAC) to NEITI to expand its tentacles to artisanal gold mining due to the environmental and public health concerns. However, this recommendation remains largely unimplemented. Thus, the continued exclusion of ASM from NEITI's scope

<sup>&</sup>lt;sup>67</sup> Section 1, 4 and 5.

<sup>&</sup>lt;sup>68</sup> Section 1 and 20.

<sup>&</sup>lt;sup>69</sup> NEITI Act, 2007 No. 69

<sup>&</sup>lt;sup>70</sup> Sections 1, 2, 3, 4, and 16.

<sup>&</sup>lt;sup>71</sup> (n 55).

<sup>&</sup>lt;sup>72</sup> ibid.

undermines its potential as a comprehensive accountability mechanism in Nigeria's extractive sector, especially where informal activities dominate.

It must be noted that NEITI has been taking baby steps towards adopting this recommendation. Thus, the NEITI's Strategic Plan (2022-2026)<sup>73</sup> shows a shift towards integrating Environmental, Social, and Governance (ESG) metrics into its framework. The plan recognises that investment decisions in the extractive sector are increasingly guided by ESG standards, and highlights the potential of the EITI framework to contribute to ESG performance, particularly in areas such as artisanal and small-scale mining. One of the expected outcomes under this plan is for NEITI's activities, projects, and data to respond to the evolving needs of the public, government, and private stakeholders. To support this, NEITI has identified a dedicated activity: conducting a study on artisanal and small-scale miners (ASMs). While this is a positive development, it remains to be seen whether it will translate into effective oversight, formalisation, and environmental accountability for ASM operations.

## 3.6. Harmful Waste (Special Criminal Provisions) Act

Since artisanal and small-scale mining is associated with environmental degradation, this Act is relevant. The Act prohibits carrying and dumping or deposition of harmful waste in the environment without lawful authority, and also provides for punishment for offenders (both individuals and corporate bodies).<sup>74</sup> It also imposes civil liability on offenders for the benefit of persons who have suffered injuries as a result of the offending Act.

Altogether, the foregoing suggests that Nigeria has a robust legal and regulatory framework on paper. However, in practice, the implementation of the various laws is defective. The implementation of these laws would be significantly more effective if the mining industry were fully formalised. The widespread presence of informal and unregulated ASM operations complicates enforcement efforts.

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<sup>&</sup>lt;sup>73</sup> Nigeria Extractive Industries Transparency Initiative, 'Strategic Plan 2022-2026.' (2022). < NEITI-Strategic-Plan-2022-2026.pdf>accessed 20 June 2025.

<sup>&</sup>lt;sup>74</sup> Sections 6, 7 and 12.

## 4.0. Recommendations for Aproactive Multisectoral Approach

To address the widespread environmental degradation caused by artisanal and small-scale mining (ASM) in Nigeria, and to ensure alignment with Sustainable Development Goals (SDGs), a coordinated and comprehensive approach is required. Drawing from local research and international best practices, particularly the Ethiopian model, this section outlines legal, policy, administrative, and social recommendations for a more effective and inclusive regulatory framework.

### 4.1. Strengthening the Legal Framework

The non-justiciability of environmental rights under Chapter II of the 1999 Constitution undermines citizens' ability to seek redress against environmental harm. Therefore, constitutional reform is necessary. Even though, the indirect methods of enforcement highlighted in this paper are viable options, it is recommended that environmental rights under Chapter II should be enshrined in Chapter IV of the Constitution, following international best practices. This will ensure direct enforcement, and make the government more accountable.

In parallel, the Nigerian Minerals and Mining Act, 2007, should be revised to reflect the realities of Nigeria's ASM sector. A reformed Act should eliminate vague enforcement language such as 'as far as reasonably practicable' in Section 118, and replace it with specific, binding obligations on environmental compliance. More critically, the law must acknowledge the informal dominance of the ASM sector and provide tailored frameworks to support formalisation and compliance.

A leaf could be borrowed from the Ethiopian decentralised governance model under Proclamation No. 678/2010. Ethiopia presents a comprehensive and well-structured model for formalising and regulating artisanal and small-scale mining (ASM), grounded in a stable legal and regulatory framework.<sup>75</sup> Governed primarily by Proclamation No. 678/2010 and its subsequent amendment in 2013, Ethiopia issues two types of ASM

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<sup>&</sup>lt;sup>75</sup> (n 52).

licences: the Artisanal Mining License (AML), which is non-renewable and limited to two years, and the Special Small Scale Mining License (SSML), introduced in 2013 to encourage artisanal miners to transition toward more mechanised and productive operations.<sup>76</sup> Notably, the 2013 amendment reduced the maximum period for an AML licence to from nine years to two years. This is to make artisanal miners see ASM as a pathway to broader economic engagement, rather than a permanent informal activity.

Licensing and taxation responsibilities are decentralised to regional governments, which manage both the issuance of permits and the collection of income tax and royalties, ensuring equitable distribution of mining revenues. Ethiopia also supports miners with tools, machinery, safety training, and extension services, while licensed buying centres purchase gold from ASMs at 5% above market value. This creates a legal market, prevents smuggling, ensures royalty accuracy, and promotes fair pricing.<sup>77</sup>

In terms of environmental and community safeguards, Ethiopia has adopted a tiered system. While holders of basic Artisanal Mining Licenses are not required to submit Environmental Impact Assessments (EIAs), those seeking to upgrade to Special Small Scale Mining Licenses must do so, alongside setting aside funds for environmental rehabilitation and community development initiatives. To improve sustainability, the Ministry of Mines and Petroleum has issued detailed Environmental Guidelines for artisanal miners and local communities, aimed at mitigating ecological damage and promoting responsible practices. Supported by the African Minerals Development Centre (AMDC), Ethiopia's approach integrates licensing, taxation, environmental management, and social responsibility into a coherent and enforceable structure, making it a valuable model for reform in countries like Nigeria.

It must be noted however, that Nigeria's constitutional power-sharing arrangement which vests the regulation of the mining sector within the exclusive legislative competence of

<sup>&</sup>lt;sup>76</sup> The Ministry of Mines and Petroleum, Ethiopia, 'Artisanal and Small Scale Ming (ASM) Legislation and Regulations - MoM' (*MoM*2020) <a href="http://www.mom.gov.et/index.php/artisanal-and-small-scale-mining/artisanal-mining-asm-legislation-regulations/">http://www.mom.gov.et/index.php/artisanal-and-small-scale-mining/artisanal-mining-asm-legislation-regulations/</a> > accessed 21 June 2025.

<sup>&</sup>lt;sup>77</sup> ibid.

<sup>&</sup>lt;sup>78</sup> ibid.

the federal government<sup>79</sup> could be a challenge to the replication of the Ethiopian decentralised model. Nonetheless, meaningful implementation of reforms by relevant federal ministries, coupled with strategic collaboration from state and local governments, remains both feasible and essential for improving governance and regulatory oversight in the sector.

### 4.2. Enhancing Formalisation and Regulatory Compliance

To move from reactive regulation to proactive oversight, Nigeria must adopt a national ASM formalisation strategy, inspired by Ethiopia's success. Ethiopia's licensing model includes streamlined permit procedures, technical and financial support for miners, and the use of government-approved mineral buying centres to prevent smuggling and ensure fair pricing. Nigeria can adopt a similar system by expanding its network of licensed Mineral Buying Centres (MBCs) and linking them to a centralised, government-designated buyer or commercial bank.

Formalisation should also involve simplifying and expediting the registration of ASM cooperatives, supported by the ASM Department of the Ministry of Solid Minerals Development (MSMD). ASMs must be provided with equipment, technical training, and safety tools, particularly through leasing arrangements, to bridge existing gaps in capital and skills. A 2023 study co-led by the RMAFC, UNDP, and OSSAP-SDGs underscores the value of this approach. It found that pilot formalisation in Plateau State led to productivity gains of up to 85%, and recommended replicating such models nationwide.<sup>81</sup> Importantly, state and local governments must be empowered not just in licensing but also in advocacy, monitoring, and revenue tracking.

## 4.3. Integrating Environmental and Social Policies

Environmental sustainability must be embedded into mining governance through robust environmental and social protocols. Nigeria should adopt community-based environmental monitoring, strengthened extension services, and integrated use of

<sup>&</sup>lt;sup>79</sup> Item 39 Exclusive Legislative List.

<sup>80 (</sup>n 68).

<sup>81 (</sup>n 52).

technology such as Geographic Information Systems (GIS) to track impacts. Drawing from Ethiopia's model, environmental standards should be tied to infrastructure investment and economic transformation strategies, ensuring high compliance.

The federal government must also implement environmental protection protocols tailored to local contexts and promote participatory environmental governance involving host communities. These should be supported by NESREA in collaboration with state environmental agencies.

## 4.4. Promoting Sustainable Mining Practices

The promotion of sustainable mining practices is key to eradicating environmental degradation in the solid minerals mining sector. This can be achieved in a myriad of ways. Since the mining sector is dominated by the informal sector, the government can create incentives for private investors, and foreign companies to invest in the solid minerals mining sector in order to enlarge the formal sector. Companies cannot operate outside the regulatory environment. This will create an avenue for regulatory agencies to have more control, and oversight over mining operations, thereby promoting sustainable mining practices. Partnerships with the states, and local governments will also help in capturing illegal miners, and discovery of harmful mining practices.

Technology can also be harnessed in preventing environmental degradations, and promoting sustainable practices.<sup>83</sup> For instance, the government can invest in the use of Geographic Information System (GIS) as a decision support tool for environmental management, for tracking solid minerals, and the environmental implications of mining operations<sup>84</sup>.

Also, the existing system of formalising small-scale and artisanal mining, through the grant of leases to the participants, and establishment of buying centres should be aggressively implemented, and enforced across board. Thus, with public enlightenment,

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<sup>&</sup>lt;sup>82</sup> Violet Aigbokhaevbo, 'Combating Environmental Crimes in Nigeria: A Daunting Uncertainty' (2011). *NIALS Journal of Environmental Law.* Vol. 1 2011: 200-229.

<sup>83 (</sup>n 8).

<sup>84</sup> ibid.

the government can provide incentives for miners in this sector to voluntarily subscribe to the scheme. Implementing all these will not only save resource-rich communities, it will save the environment, the climate, and human lives from the catastrophic effects of prolonged unsustainable mining practices.

### 4.5. Improving Governance, Transparency, and Public Engagement

Regulatory agencies must strengthen inter-agency coordination, enforce stricter licensing compliance, and establish clear reporting lines. Shed operators should be mandated to source minerals only from registered cooperatives, while security agencies should be empowered to combat mineral smuggling through verified checkpoints.

Ongoing sensitisation campaigns should be conducted in collaboration with local councils to educate miners about the benefits of formalisation, environmental safeguards, and regulatory obligations. NEITI, under its 2022–2026 Strategic Plan, should operationalise its proposed ASM study and use the findings to develop ESG-based metrics specific to ASM operations. This will help close accountability gaps and align Nigeria's extractive governance with international transparency standards.

Ultimately, the success of any regulatory reform in Nigeria's ASM sector will depend not only on the robustness of the legal framework but also on the political will to enforce it, the inclusiveness of its implementation, and the commitment to safeguarding both human and environmental well-being. Only through coordinated, accountable, and peoplecentred action can Nigeria realise the full developmental potential of its solid minerals sector.

#### 5.0. Conclusion

Nigeria's legal framework for regulating environmental degradation in the solid minerals mining sector, though comprehensive in theory, fails in practice due to weak enforcement, vague legislative provisions, and the dominance of informal mining activities. This article has shown that while there are numerous laws and institutions intended to address environmental risks, they remain largely ineffective because of

systemic implementation gaps and an over-centralised regulatory structure. To achieve meaningful reform, Nigeria must take bold steps to make environmental rights justiciable under the Constitution, revise its mining legislation to reflect the realities of ASM, and adopt more decentralised and inclusive regulatory models, as seen in Ethiopia. Additionally, increased investment in formalisation schemes, environmental monitoring, community participation, and gender- and child-protection mechanisms is critical. A proactive and collaborative multisectoral approach, grounded in legal accountability and guided by the SDGs, offers Nigeria a realistic path forward. Only then can the country shift from reactive mitigation to preventive governance, securing both its environmental future and the rights of its most vulnerable communities.