Policy Research on Solid Mineral Development in Nigeria:

Evidence from Ebonyi, Ekiti and Taraba States

(Centre LSD)

OSIWA

JANUARY 2021

Policy Brief No. 20

Policy Research on Solid Mineral Development in Nigeria:

Evidence from Ebonyi, Ekiti and Taraba States

(Centre LSD)

OSIWA

JANUARY 2021

Policy Brief No. 20

Table of Contents

Table of Figures

Table of Tables

List of Acronyms

Acronyms	Meaning
ASMs	Artisanal and Small-Scale Miners
ASMD	Artisanal and Small-Scale Mining Department
CDAs	Community Development Agreements
CU	Cadastre Unit
EL	Exploration License
EIA	Environmental Impact Assessment
FGN	Federal Government of Nigeria
MCO	Mining Cadastre Office
MECD	Mines Environmental Compliance Department
MID	Mines Inspectorate Department
MIREMCO	Mineral Resources and Environmental Management Committee
ML	Mining Lease
MMSD	Ministry of Mines and Steel Development
NEITI	Nigerian Extractive Industry Transparency Initiative
NESREA	National Environmental Standards and Regulation Enforcement Agency
NGSA	National Geological Survey Agency
NMMA	Nigerian Minerals & Mining Act
QL	Quarry Lease
RP	Reconnaissance Permits
SSML	Small Scale Mining Lease

EXECUTIVE SUMMARY

Nigeria is a resource endowed country. Official statistics suggests that the country has over 44 solid minerals distributed across the 36 States of the country. These natural resources had shaped the country's pre-independence industrialization trajectory as minerals were both a source of energy (in the case of coal) as well as tradable commodity (e.g., Columbite, Tin, Lead and Zinc). However, the discovery of and focus on crude oil production in the 1970s led to a significant decline in the development of the solid mineral mining industry. The nationalization policies of the 1970s and 1980s further worsened the State of solid minerals mining in Nigeria. Many foreign investors exited the industry due to poor operating conditions, which set the industry on a downward spiral evidenced by the massive drop in solid mineral's contribution to Nigeria's GDP and export. The long neglect of sector, despite solid mineral abundance, comes at a cost such as deprived alternative sources of energy sources, employment generation, investment opportunities, foreign exchange, and tax revenues.

However, the oil price crisis of 2014, which severely strained Nigeria's finances and foreign exchange earnings, inspired an urgency to diversify Nigeria's economy away from oil as the major source of government revenue and foreign exchange earnings. This, amongst other things, led to a renewed interest to develop Nigeria's solid mineral industry as a major employer of labor and a reliable source of tax and foreign exchange revenue. Whilst the Federal Government of Nigeria is continually improving the industry's regulatory framework to encourage private investment, the sector still contributes very little to Nigeria's GDP and gross exports. In the light of this, the objective of this study are as follows:

i. Review the levels of interaction and engagement of governments in focus States of the project with solid mineral sector, national and sub-national related policies' implementation, regulation of mining activities and revenue beneficiation mechanisms;

ii. Undertake a holistic review of the effectiveness and quality of Community Development Agreements with special focus on project's target States;

iii. Evaluate environmental policies adherence and compliance trends, challenges and sustainable solutions in target States;

iv. Interrogate fiscal regimes in the sector- national and subnational, revenue leakages challenges, State governments' benefits and projections for national economy diversification; and

v. Review of artisanal mining coverage in target States, participation of women and children in mining, regularization issues and an examination of challenges with the tracking of revenue streams of the informal mining sector.

The assignment was aimed to better understand the existing policy and institutional design and framework of Nigeria's solid mineral industry, the actors and their interactions, interests and the different activities undertaken in the sector in order to proffer evidence-based policy and regulatory regime that can help better the sector and some of the initiatives the government is already implementing.

The report is primarily based on information obtained during field visits to three States in Nigeria: Ebonyi, Ekiti, and Taraba. Three Local Government Areas (Gashaka, Ardo Kola, and Karim Lamido) were visited in Taraba State, seven in Ebonyi State (Abakaliki, Ebonyi, Ezza North, Ezza South, Ikwo, Izzi and Ivo) and four in Ekiti State (Ado-Ekiti, Ijero, Ikere and Oye). The States were chosen because of their respective high solid minerals' endowment, and current mining activities. Hence, they collectively represent solid minerals spread across the federation, and serve as yardsticks to determine (in-)actions of stakeholders in the sector and what might be responsible for the abysmal performance of the solid minerals mining in the country. Primary data obtained during the field visits are complemented with desk reviews of relevant literature obtained from national sources and institutions, and secondary data from national institutions such as CBN and NEITI. The interactions during the field visits involved interviews and submitted questions. After the field visits, additional information and validation were obtained from the sources established during the field visits; such meta-data brought on valuable insights.

In line with the objectives of this study, some of the key findings of our study are presented according to the respective study focus. Overall, we there are substantial gaps in implementation of policies related to mining activities in the three States, particularly in area of revenue collection. The industry is fraught with unclear as wells as a multiplicity of fees on mining activities at different levels: statutory fees, discretionary fees from State and local governments, as well as local communities. This lack of clarity in the existing guidelines on fees has encouraged underreporting and smuggling in the States. Similarly, regulations around mineral sales are largely unobserved as miners tend to sale minerals outside of the official minerals market's institutional framework.

On the effectiveness and quality of Community Development Agreements (CDAs), our survey shows that many mining communities are generally dissatisfied with the practice of community engagement by miners. For instance, mining communities in Taraba State do not have CDAs. And even in mining communities in States such as Ebonyi and Ekiti States, where CDAs exist, community leaders' express dissatisfaction with the extent of implementation of those CDAs. These communities feel largely powerless in confronting mining investors in cases where commitments to project implementation have been weak. This sense of powerlessness also affects other outcomes of mining activities in the respective communities including the condition of the environment.

Our study also finds severe regulatory failures regarding adherence to environmental policies and regulations. While regulatory agencies across the three survey States accuse artisanal miners of being the most environmentally unfriendly mining operators, we find evidence of regulatory failures on the enforcement of environmental policies in many mining communities. Operators as well as regulators are aware of the myriad of environmental challenges in mining communities, but little has been done to redress those challenges. These regulatory failures are a symptom the overall regulatory failure and discontent across tiers of government.

Our evaluation of fiscal regimes in the sector and across tiers of government show that both civil servants in government agencies and solid minerals industry operators in the States perceive the statutory fiscal regime to be adequate. The main concerns arise from non-statutory fees. Some community leaders have the impression that their communities ought to get more benefit from

mining in terms of statutory revenue allocation. We observe reasonable correspondence between statutory allocation based on the 13% mineral derivation rule and the amount of mineral produced in the States. We note however, that although Ekiti State is reported to have produced more solid minerals than Taraba in the NEITI 2016 report, it received lower 13% solid mineral derivation allocation. Revenue leakages have also been perverse.

We find that governments have remained largely unable to address the weakness with revenue collection which is increasingly hindering the realization of projections for national economy diversification. Some of the reasons for these challenges include: smuggling of minerals; inaccessibility to mining sites; informal organizations of artisanal miners, which make it difficult for government to appropriately tax the sector; lack of solid mineral buying centers, which intensifies sales and distribution of minerals through unofficial channels and hence, a loss of revenue by the government, and lack of adequate exploration data, which makes it difficult for the government to track mining activities. These challenges do not only plague revenue collection but also the benefits derivable from the value chain for all players, including small artisanal miners.

Our survey also reveals avoidable loses to the value chain due to the fragmented nature of mining operations characterized by the massive dominance of artisanal and small-scale miners in the different local communities in the three States. Challenges with tracking of revenue streams of the informal mining sector include government difficulties in accessing the mining sites, lack of solid mineral buying centers, and exploration data, informal organizations of artisanal miners and smuggling. We find that most of the artisanal miners in Taraba and Ebonyi States operate without a mining license while those in Ekiti State either have mining licenses or operating through a cooperative permit. Artisanal miners do not process the minerals before selling them, and they sell to anyone willing to buy.

Human rights violations have also persisted in several mining sites. Women and children are involved in mining activities across the three States, their roles and responsibilities within the mining communities vary greatly. In Taraba State, women and children are involved in every activity and stage of mining. However, in Ebonyi and Ekiti States, mining activities by underage children are limited, while the roles of women are limited to the processing stage, which includes crushing, grinding, sieving, washing, panning, among others. And to corroborate the reports from community leaders and regulators, we find that artisanal miners do not obey the environmental regulations. This has led to environmental degradation, erosion, and excessive pollution, amongst other adverse effects.

In summary, our study shows that whilst the government of Nigeria is making laudable efforts to transform the solid mineral sector, the sector is still besieged with copious problems that goes beyond institutional designs. These problems involve nearly every participant in the industry and has far reaching consequences not only for the mining industry but for the economy. Tailor made policies and implementation are key. Detailed policy recommendations are contained in the last chapter.

INTRODUCTION

1.1. Solid Mineral Mining in Nigeria

Nigeria is endowed with over 44 solid minerals distributed across the 36 States of the country. The Federal Government of Nigeria (FGN) has identified seven strategic minerals – Coal, Bitumen, Limestone, Iron Ore, Barites, Gold, and Lead/Zinc – as development priorities. Mineral mining in Nigeria, which is increasingly gaining government policy attention, dates back to 1902 when the first official mining activity in Nigeria commenced with the exploration of Tin ore. Mining of other minerals including, Columbite, Coal, Lead, and Zinc, followed and contributed significantly to Nigeria's GDP and industrialization.

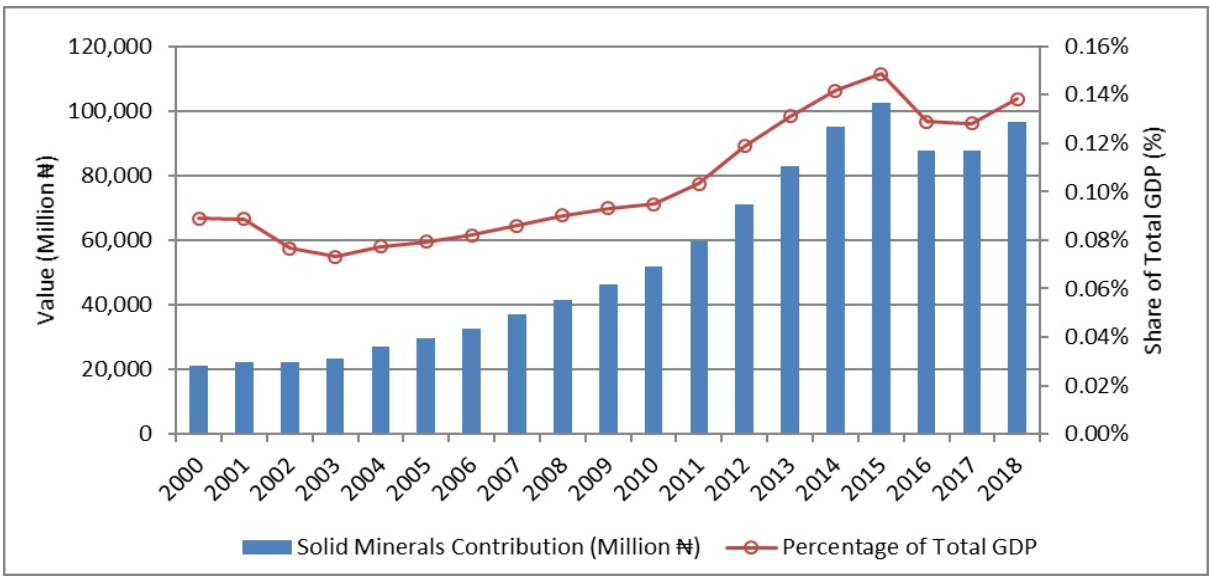
Before independence, Nigeria was popular for the production of large quantities of coal for energy generation, railways, and export. The export of Columbite, Tin, Lead and Zinc was also common. However, the discovery and emphasis of crude oil production in the 1970s led to a significant decline in the development of the solid mineral mining industry. The nationalization policies of the 1970s and 1980s further worsened the State of solid minerals mining in Nigeria. Many foreign investors exited the industry due to poor operating conditions, which set the industry on a downward spiral evidenced by the massive drop in solid mineral's contribution to Nigeria's GDP and export. For instance, in the early 1980s, solid minerals contributed roughly 1.2% to GDP, which declined to about 0.12% as at 2012.

The oil price crisis of 2014, which severely strained Nigeria's finances and foreign exchange earnings, inspired an urgency to diversify Nigeria's economy away from oil as the major source of government revenue and foreign exchange earnings. This, amongst other things, led to a renewed interest to develop Nigeria's solid mineral industry as a major employer of labor and a reliable source of tax and foreign exchange revenue. The federal government of Nigeria is continually improving the industry's regulatory framework to encourage private investment. These are laudable efforts given that solid minerals can contribute significantly to the industrialization of Nigeria: numerous high-value products can be derived from the industry's

value chain, although the adequate infrastructure is necessary to enable such value chain development.

Despite the ongoing efforts, the solid minerals industry still contributes very little to Nigeria's GDP and export, although there have been modest improvements over time. Figure 1 shows the annual contribution of the solid minerals industry to GPD between the year 2000 and 2018. While the industry contributed about 0.09% in 2000, the value increased to roughly 0.14% in 2018, although there were years of moderate decline, notably 2004 and 2016. Across the board, it can also be seen that the real value (in million naira) created by the industry has generally risen over the years in line with the ambitions of the government. While the industry generated roughly ₦21 billion of real GDP in 2000, the value more than quadrupled to roughly ₦97 billion by 2018.

Figure 1: Contribution of Solid Minerals to GDP



Note: Solid Minerals contribution is computed as the value created by mining and quarrying activities excluding crude petroleum and natural gas. Naira values are expressed in 2010 constant basic price.
Source: NODAC Consulting; Based on values from the Nigerian Bureau of Statistics

Figure 2 shows the contribution of solid mineral to Nigeria's foreign exchange earnings through export. There is a huge variation in the quarter on quarter minerals export. While solid minerals export totaled roughly ₦1.1 billion in 2016, the value rose to ₦7.7 billion in 2017 then fell to

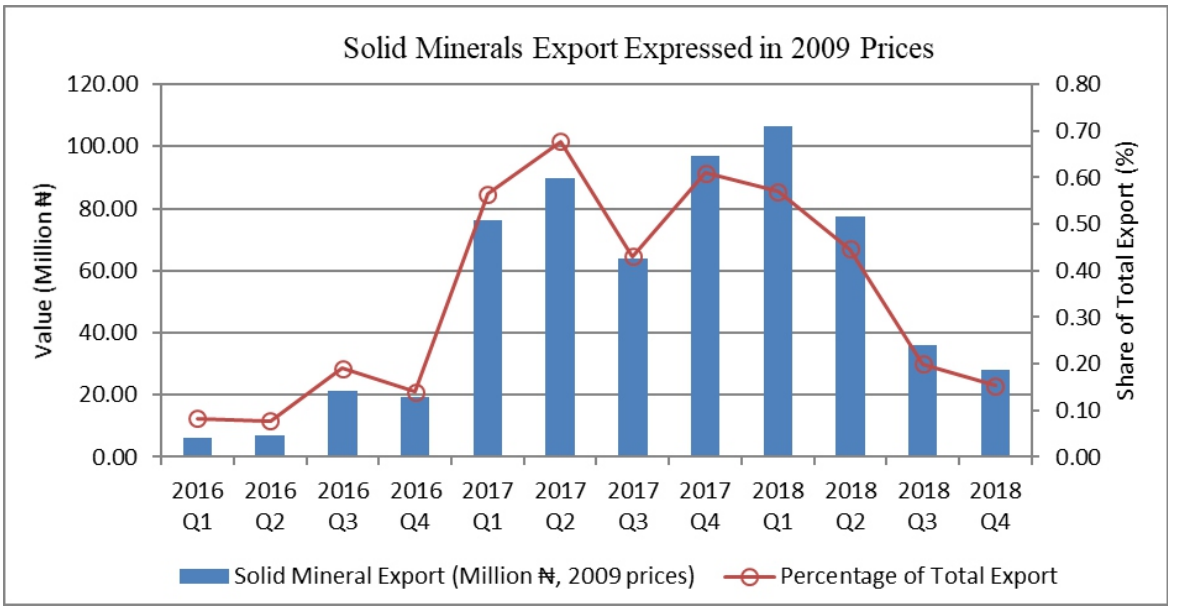
₦6.4 billion in 2018, a %16.6 decline. The industry's export as a share of total export also paints a similar picture, suggesting that the naira amounts are not merely driven by factors such as exchange rate fluctuation. Since solid minerals production increased moderately in 2018 and commodity prices did not witness a huge decline in 2018 relative to 2017, a potential explanation for the decline in the value of export is that more of the rising solid minerals production is utilized locally or further developed along the value chain. Another less optimistic possibility is that the extracted minerals are traded through unofficial channels.

The low contribution of solid minerals industry to GDP and export manifests further in the miserly 0.3% of national employment[1] which the industry accounts for. The evidence so far clearly shows that the solid minerals industry is operating way below its potentials in terms of contribution to GDP, export earnings, and job creation. Of course, what happens at the aggregate is an indication of the problems inherent at the level of federating States, with significant cross-sectional variation across States.

Figure 3 shows that as at 2016, only 10,908 persons were officially employed by the solid minerals extractive industry. 10,561 of this number are Nigerian nationals while the rest are non-Nigerian.

Figure 2: Foreign Exchange Earnings from Solid Minerals

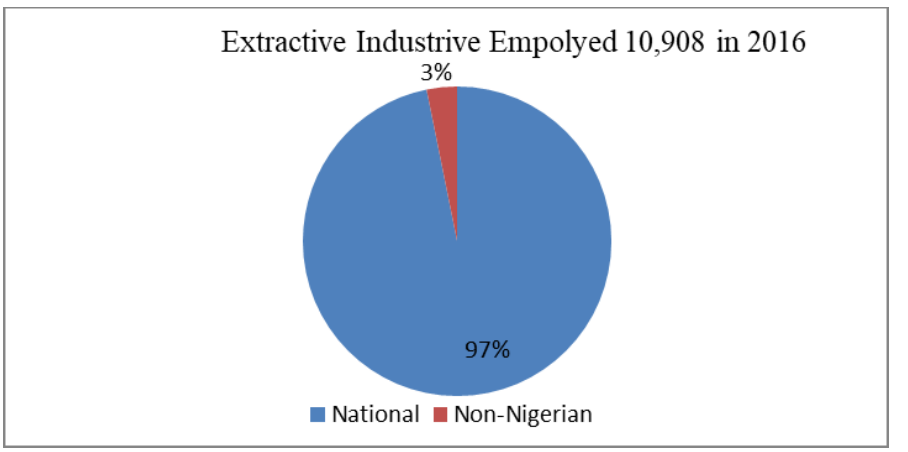
[1] See The Nigerian Metal and Mining Investment Promotion Brochure 2017: https://www.a-mla.org/images/acts/Nigeria-Ministry-of-Solid-Minerals-Investment-BrochureV14.pdf.pdf



Note: Solid Mineral is as defined in Figure 1
Source: NODAC Consulting; Based on values from the Nigerian Bureau of Statistics

The evidence so far clearly shows that the solid minerals industry is operating way below its potentials in terms of contribution to GDP, export earnings, and job creation. Of course, what happens at the aggregate is an indication of the problems inherent at the level of federating States, with significant cross-sectional variation across States.

Figure 3: Employment in Solid Minerals Extractive Industry



Source: NODAC Consulting; Based on values from NEITI Solid Minerals Industry Audit Report, 2018

1.2 Terms of Reference

The objective of the study as Stated in the terms of reference include:

vi. States and the Mining Sector: Review the levels of interaction and engagement of governments in focus States of the project with solid mineral sector, national and sub-national related policies' implementation, regulation of mining activities and revenue beneficiation mechanisms.

vii. Community Development Agreements: Undertake a holistic review of the effectiveness and quality of Community Development Agreements with special focus on project's target States

viii. Securing Mining sector Environments: Evaluate environmental policies adherence and compliance trends, challenges and sustainable solutions in target States

ix. Mining Sector Fiscals: Interrogate fiscal regimes in the sector- national and subnational, revenue leakages challenges, State governments' benefits and projections for national economy diversification.

x. Informal Mining sector: Review of artisanal mining coverage in target States, participation of women and children in mining, regularization issues and an examination of challenges with the tracking of revenue streams of the informal mining sector.

1.3 Scope of the Study and Methodology

This report is primarily based on information obtained during field visits to three States in Nigeria: Ebonyi, Ekiti, and Taraba. The study focuses on three States in Nigeria: Ebonyi, Ekiti, and Taraba. The States were chosen because of their respective high solid minerals' endowment. Hence, they collectively represent solid minerals spread across the federation, and serve as yardsticks to determine (in-)actions of stakeholders in the sector and what might be responsible for the abysmal performance of the solid minerals mining in the country.

- Three Local Government Area visited in Taraba State: Gashaka, Ardo Kola, and Karim Lamido.

- In Ebonyi State, seven (7) local government areas were visited: Abakaliki, Ebonyi, Ezza North, Ezza South, Ikwo, Izzi and Ivo.

- In Ekiti State, four (4) local government areas were visited: Ado-Ekiti, Ijero, Ikere and Oye.

Primary data obtained during the field visits were complemented with desk reviews of relevant literature obtained from national sources and institutions, and secondary data from national institutions such as CBN and NEITI. The interactions during the field visits involved interviews and submitted questions. After the field visits, additional information and validation were obtained from the sources established during the field visits; such meta-data brought on valuable insights.

Draft report was produced and subjected to validation across the three focal States with Taraba State on 25th and 26th August 2020; Ebonyi State on 18th and 19th November 2020; as well as Ekiti State held on 1st and 2nd December 2020. Comments and contribution from State and non-State actors were incorporated in the report.

THE STATE OF SOLID MINERALS MINING IN THE FOCAL STATES

2.1. Solid Minerals Industry in Ebonyi, Ekiti, and Taraba States

Like other States in Nigeria Ebonyi, Ekiti and Taraba States – the focal points of this study – have a number of solid mineral deposits. Table 1 shows the solid minerals in each of the States and these States have at least one of the strategic minerals identified by the federal government for development. The wide array of minerals across the three States is exemplary of the rest of the federating States in Nigeria: different sets of mineral deposits are in different States, creating an opportunity for a robust solid mineral ecosystem in Nigeria as a whole.

Table 1: Distribution of Solid Minerals across Ebonyi, Ekiti and Taraba States

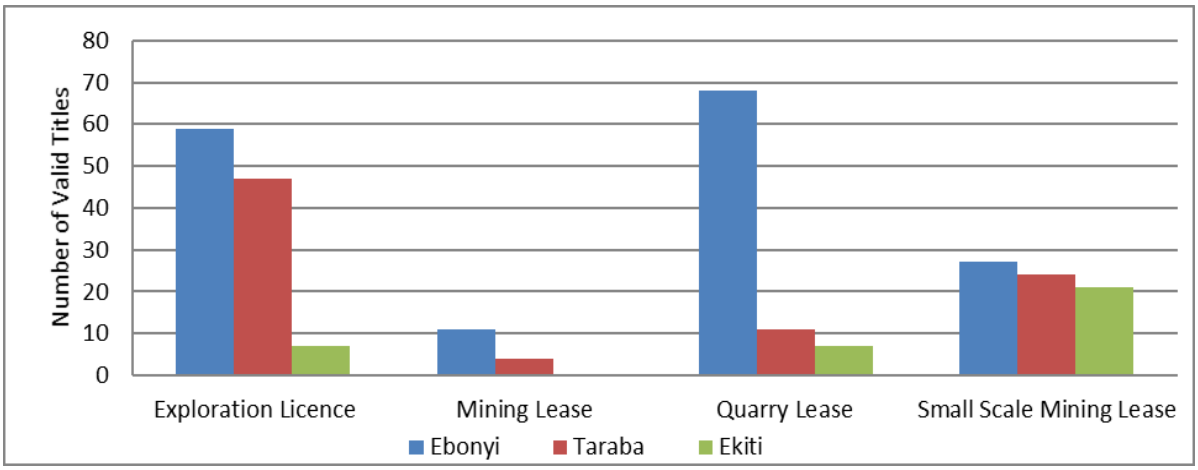
Ebonyi	Ekiti		Taraba	
• Lead • Zinc ore • Salt • Limestone • Ball clay • Refractory clay • Gypsum • Granite	• Clay • Carnotite • Quartz • Lignite • Granite • Gemstone • Bauxite	• Cassiterite • Columbite • Tantalite • Feldspar • Kaolin	• Fluorspar • Garnet • Tourmaline • Sapphire • Zircon • Tantalite • Columbite • Cassiterite	• Barite • Galena • Limestone • Laterite • Calcite • Bentonitic clay • Sapphire

Source: NODAC Consulting; Based on the Nigerian Metal and Mining Investment Promotion Brochure 2017

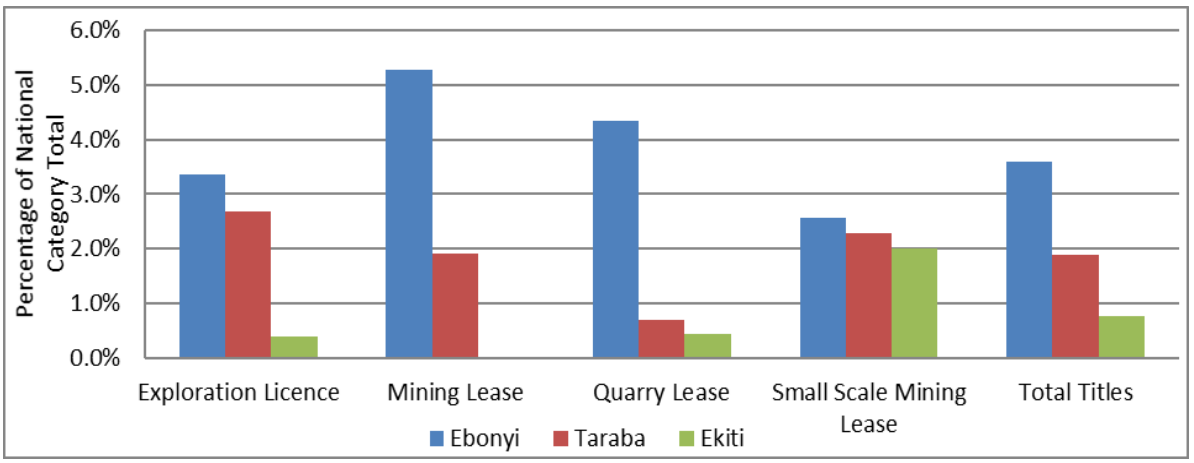
The distribution of minerals across the States also manifests in the distribution of mineral titles. As at the publication of NEITI 2018 audit report, Kaduna State has 438 mineral titles, the highest number of valid mineral titles across all States in Nigeria. Figure 4 shows the distribution of mineral titles across Ebonyi, Ekiti and Taraba States. Panel A of the figure shows that Ebonyi State has the highest number of all mineral title types. Panel B shows that Ebonyi State accounts for roughly 3.6% of the total valid mineral titles in Nigeria, which translates to 165 valid mineral titles. On the other hand, Taraba State accounts for 1.9%, while Ekiti State accounts for 0.8% of valid mineral titles nationally.

Figure 4: Distribution of Solid Mineral Titles across Ebonyi, Ekiti and Taraba States

Panel A: Number of Mineral Titles Type



Panel B: Mineral Titles Type in State as a Percentage of National Category Total



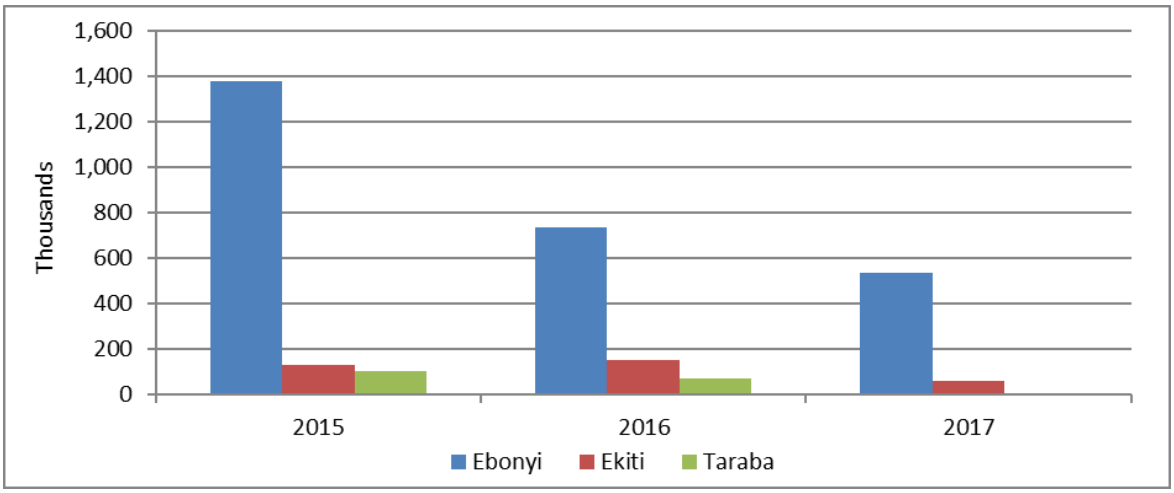
Source: Based on NEITI Solid Minerals Industry Audit Report 2018

Evidently, the fraction of national mineral titles in these States is relatively low, particularly for Taraba and Ekiti. It makes one wonder why mining operators choose some States over others. While the quantity of the mineral deposit is an important factor that matters for mine location, poor and heterogeneous operational environment is another crucial factor that could explain the low and divergent number of licensed miners in the States. These operational considerations

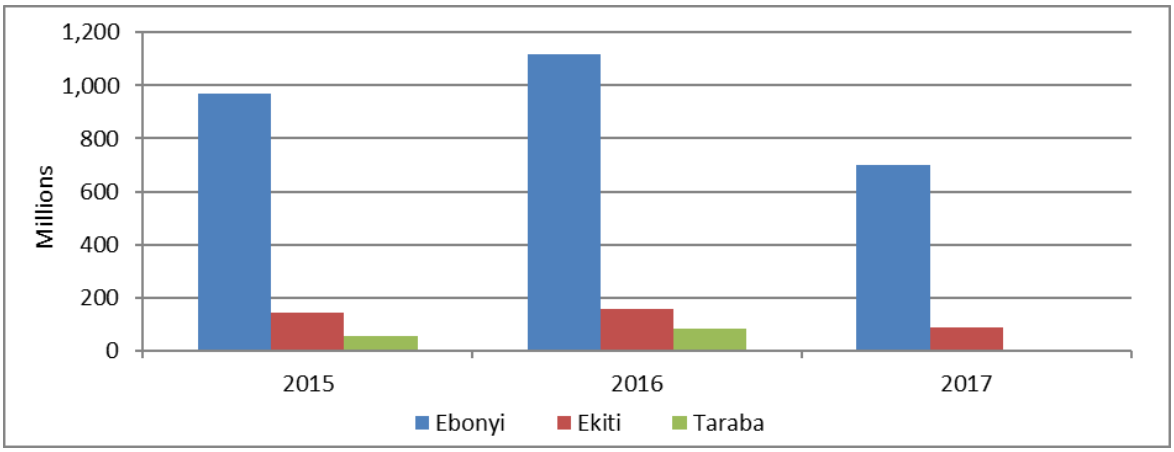
include the quality of infrastructure, attitude of host communities and community leaders towards mining, and the security of mining infrastructure in the States.

Figure 5: Solid Minerals Production in Ebonyi, Ekiti and Taraba

Panel A: Quantity of Mineral Production Sold (Thousand Tons)



Panel B: Value of Mineral Production Sold (Million ₦)



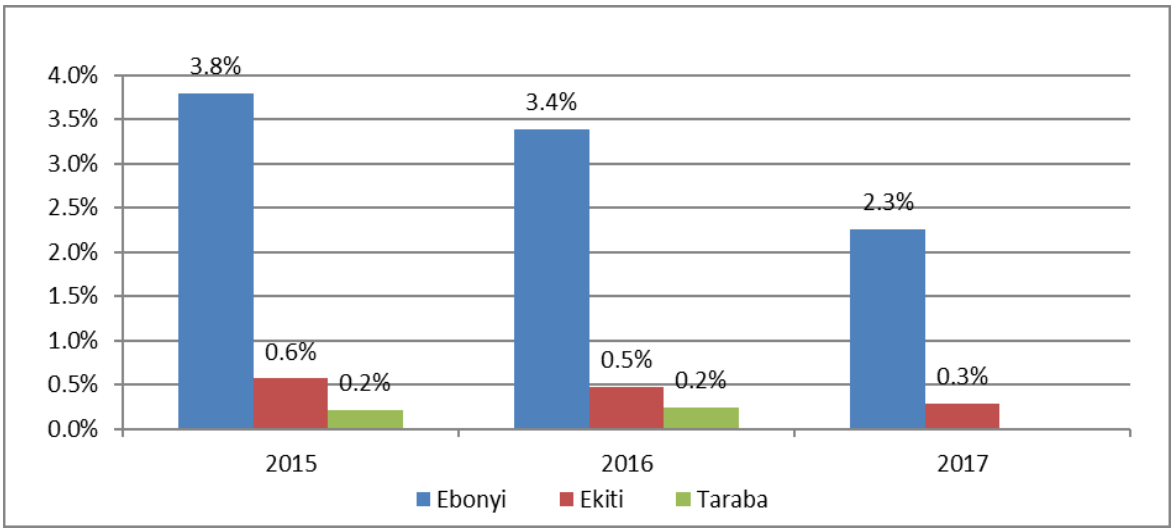
Source: NODAC Consulting; based on NEITI Solid Minerals Industry Audit Report 2017, 2018 and 2019

The divergence of the mineral titles held across the three States further manifests in the quantity and value of minerals produced. Figure 5 shows, as expected, that of the three States, Ebonyi has the highest quantity of mineral production as well as mineral value. While the quantity produced by the State (shown in Panel A) consistently declined between 2015 and 2017, the value of

mineral sold (shown in Panel B) increased in 2016 and declined in 2017. It is interesting to observe that although Taraba State has more mineral titles than Ekiti, its production quantity and value were lower than that of Ekiti in 2015 and 2016. We could not obtain the 2017 production data for Taraba to see if this trend persisted.

An important evidence that emerges from this comparative analysis is that some valid mineral licenses in some States, like Taraba, are either not being currently used or the production level from the mines is relatively little. If the former is the case, it again raises concerns about why investors acquire mineral titles and then abandon the actual mining activity. Our survey suggests that mining finance is an essential factor that could explain the non-operation of some mining titles. A common narrative amongst investors we surveyed in the different States is that it is hard to obtain mining finance in Nigeria, mainly due to the long term nature of mining investment and high risk of the mining projects.

Figure 6: Fraction of National Solid Minerals Royalty Contributed by Ebonyi, Ekiti and Taraba



Source: NODAC Consulting; Based on NEITI Solid Minerals Industry Audit Report 2017, 2018 and 2019

To understand how the solid minerals production in the States compares nationally, as well as how much the States' solid minerals industry contributes to national finances, Figure 6 shows the percentage of national mining royalties generated from Ebonyi, Ekiti and Taraba States. Evidently, these States account for a very little proportion of national mining royalties.

Again Ebonyi State stands out, with a contribution of 3.8% in 2015, which declined to 2.3% by 2017. On the other hand, Ekiti contributed 0.6% and 0.3% in 2015 and 2017, while Taraba contributed a negligible 0.2% in both 2015 and 2016 (we could not obtain the 2017 royalty contribution data for Taraba). Besides the relatively low fraction of mining royalties contributed by these States despite their abundant mineral deposits, it is disturbing to observe that across board, these contributions declined consistent with the declining level of production in the States. The declining trend in these States is troubling because it goes against the ongoing efforts of the federal government aimed at significantly increasing revenue from mining activities. Also, declining production reduces the amount of revenue the States can generate internally from mining activities and through federal allocation. Other ramifications could manifest in lower employment, which has other spillover effects on the income and standards of living in the States.

Our surveys reveal that many miners in Ebonyi, Ekiti and Taraba States operate as cooperatives with no formal mining license. This means that a potentially huge proportion of the mining activities in the States are either unreported or underreported. As a result, the number of licenses reported in Figure 4 and production values in Figure 5 may not accurately reflect the level of mining activity in the States. Moreover, the high level of smuggling and underreporting alleged by government agencies to be perpetrated by registered miners in the States further suggest that the official production numbers are only a fraction of the actual mining activity in these States, with an adverse consequence for the fiscal governance of solid minerals mining.

2.2. SWOT Analysis for the Focal States' Solid Minerals Industry

To generate deeper insights on the solid minerals industry dynamics in Ebonyi, Ekiti and Taraba States, one needs to analyze the Strengths, Weaknesses, Opportunities and Threats (SWOT) of the industry in the respective States. Our surveys and interactions with industry practitioners, civil servants in relevant government agencies, and community leaders suggest that the solid minerals industry in these States face very similar weaknesses and threats, and have equally similar strengths and opportunities.

The high similarity of the SWOT of the States is not surprising because part of the major bottleneck to mining industry development in Nigeria is the effective implementation of the

regulatory framework that governs mining, which is largely under the power of the federal government. Although the institutional framework has significantly improved in recent years, with clear guidelines and rules defined, a lot remains in the area of implementation and elimination of redundant bureaucracy.

A key weakness of the solid mineral industry that featured most frequently in our survey is multiple fees and taxes across the different tiers of government and community leaders. For instance, we found that in addition to fees levied by the federal government, in Ekiti State, solid mineral industry practitioners are required to pay several other fees such as environmental permit fees, audit certification fees, and environmental management plan certification fees. There are also fees from drivers unions, local communities, and landowners. In Ebonyi, some communities require miners to pay youth levy and buy items such as yams, goats, and drinks. On the other hand, the State government demands an intent fee, registration fee, and haulage fee. Indeed, while some of these fees are justified, it is clear that others are avenues for rent-seeking, which discourage the development of the solid minerals industry in the States.

Another weakness that frequently appeared in our survey in all three States is the insecurity of mine sites. Insecurity has been an issue in most parts of Nigeria in recent years. However, there are other dimensions of insecurity regarding mining that potentially arise from conflicts between host communities and licensed miners. The problem of insecurity is not easy to solve at the State level given that the security apparatus of Nigeria, such as the police force, is nationally administered.

Weak infrastructure and poor access to mining finance are equally common constraints in Ebonyi, Ekiti and Taraba. While the State governments have a huge role to play to improve infrastructure in their States, particular access roads, other dimensions of infrastructure such as power supply is beyond the control of the State governments. Mining finance depends on the level of risk perceived by potential lenders. As it stands, the risk perception appears to be high in Nigeria as a whole, given the other constraints already mentioned. Our survey reveals that one mechanism through which some miners circumvent the finance constraint is to obtain advance payments from mineral buyers and then pay back with mineral supplies after mineral extraction. A problem with this financing arrangement is that it could potentially be exploitative when the miners have few or no options. However, the Ekiti and Taraba States governments have

developed initiatives that could help mining finance by improving the risk perception of some mining operators in the States. Both States have developed a State sponsored mining corporation that can obtain a mining license and enter into a joint venture with the private sector. Such an arrangement could give more confidence to lenders, making it easier for the private sector to secure mining finance.

Figure 7: Summary of SWOT Analysis for Ebonyi, Ekiti and Taraba States

Source: NODAC Consulting

Ebonyi State appears to have some strength that outweighs that of Ekiti and Taraba. The State has three out of the 223 mineral buying centers in Nigeria. In the light of the weak transportation infrastructure within and across States in Nigeria, existing mineral buying centers in Ebonyi suggests that mining operators can easily transport and market minerals extracted in Ebonyi. Locational advantages like this matter for the bottom line, making it an important consideration for miners. However, to the extent that interState transportation links, improve considerably, Ekiti and Taraba would not have a considerable disadvantage in this area. Moreover, as the volume of mining produced in both States rise, it would not be surprising to see new mineral

buying centers created in both States. Figure 7 summarizes the SWOT analysis that is common to Ebonyi, Ekiti and Taraba States.

2.3. Potential of Solid Minerals for the Diversification of Ebonyi, Ekiti and Taraba States

The discussion so far has highlighted the abundance of solid minerals in Ebonyi, Ekiti and Taraba States, the amount of fiscal revenue generated from the industry, and the SWOT of the industry in the States. However, it is important to understand if the industry has any scope to diversify the economy of the respective States significantly. To shed light on how far the solid minerals industry in the States can contribute to diversification,

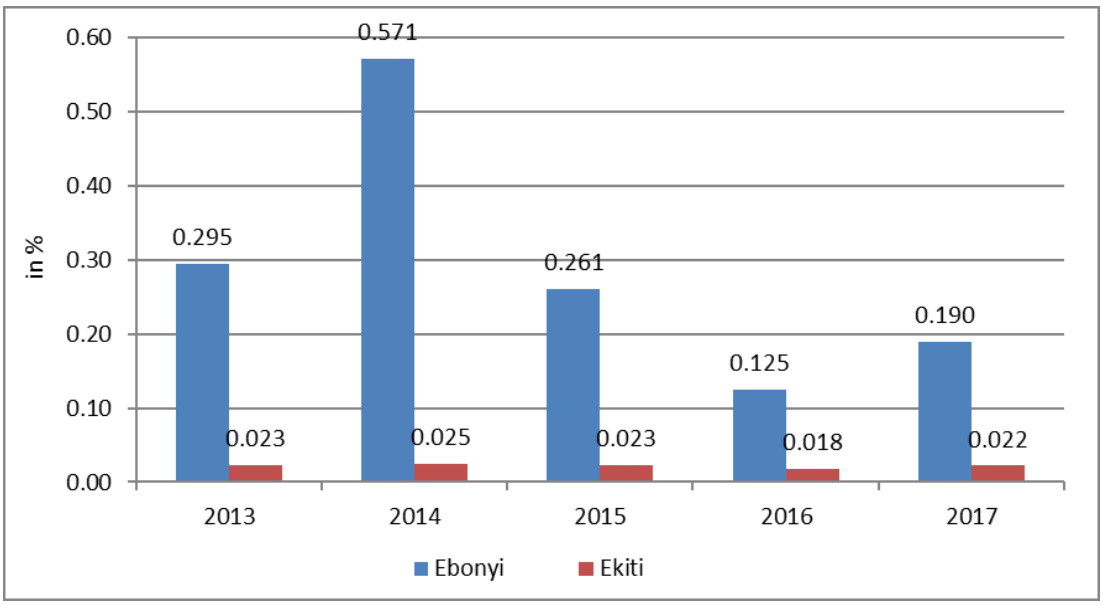
---

Figure 8 shows the contribution of Solid Minerals to the GDP of Ebonyi and Ekiti States between 2013 and 2017. The contribution to Taraba's GDP is not shown because of data limitation. However, we expect the numbers to be slightly lower than that of Ekiti given the production statistics earlier discussed.

The first observation from

Figure 8 is the meager contribution of solid minerals to the GDP of both States. The highest contribution of solid minerals to GDP in Ebonyi over the period was recorded in 2014 at 0.57%, which declined to 0.19% by 2017. While the highest contribution to Ekiti GDP was also recorded in 2014 at a trifling 0.03%, the contribution declined to 0.02% by 2017. Another observation is high variation in the contribution of solid minerals to the GDP of the States. An important implication of this is that even the little GDP generated from solid minerals in the States is highly unreliable. Reasons for this could range from the price of solid minerals in the international market, fluctuating operating conditions in the States and poor reporting of solid mineral industry statistics.

Figure 8: Contribution of Solid Minerals the GDP of Ebonyi and Ekiti States



Source: NODAC Consulting; based on values from the National Bureau and Statistics

The main insight from

Figure8 is that despite the abundance of solid minerals in Ebonyi, Ekiti and Taraba, the industry has remained almost irrelevant to economic activities in the States, particularly for Ekiti and Taraba. Therefore, the industry has substantial scope to diversify the economies of these States. Importantly, the diversification in question is not only in terms of mineral extraction; also, allied industries, such as mineral processing and trading, along the solid minerals value chain can significantly generate alternative sources of employment, income generation, sources of livelihood and government revenue in the States.

It could be argued that since the administration of solid minerals is the responsibility of the federal government of Nigeria – as the regulator of the solid minerals industry – there is very little the State governments can do to drive the development of the solid minerals industry in their States. While there is some element of truth in this notion, it would become clear from the discussion in the next chapter that the State governments still have much room to influence the development of solid minerals in their States. In fact, Ebonyi, Ekiti and Taraba States all currently have State parastatals charged with fostering the development of the industry in the States. However, based on the evidence so far, these State agencies are either not doing enough or their work is yet to start bearing fruits. The former is more likely the situation given the serious infrastructural limitations and other weaknesses highlighted in the SWOT analysis across these States, which constrain the solid minerals industry development.

To conclude this section, it is noteworthy that addressing the weaknesses and some of the threats of the solid minerals industry in Ebonyi, Ekiti and Taraba States highlighted in the SWOT analysis would allow the industry develop, enabling more profound diversification of the State economies as well as improve fiscal governance of solid minerals and government revenue.

INSTITUTIONAL FRAMEWORK AND MINING SECTOR FISCALS

3.1. Major Regulations

The fundamental legal basis and institutional framework for the solid minerals industry is provided by the 1999 Constitution of the Federal Republic of Nigeria as amended. Section 44(3) of the 1999 Constitution States that "the entire property in and control of all minerals, mineral oils and natural gas in under or upon any land in Nigeria or, in under or the territorial waters and exclusive economic zone of Nigeria shall vest in the Government of the Federation and shall be managed in such a manner as may be prescribed by the National Assembly". Accordingly, the Constitution classifies the administration of all the natural resources in Nigeria under Exclusive List. This means that only the federal government of Nigeria can legislate on the matters related to solid minerals mining. As a result, the granting and issuance of licenses, collection of royalty, taxes and bonus are reserved as the exclusive responsibility of the Federal Government. In the following sections, the major laws and regulations governing the solid minerals industry in Nigeria are discussed. At the end some State government parastatals related to solid minerals mining in Ebonyi, Ekiti and Taraba are discussed, highlighting their roles and their relevance to solid mineral mining in the States.

3.1.1. The Nigerian Minerals & Mining Act (NMMA) 2007

The Nigerian Minerals and Mining Act 2007 ("the Act") was passed into law on 16 March 2007 to regulate the exploration and exploitation of solid materials in Nigeria. The Act vests the control, regulation and ownership of all mineral resources in Nigeria on the Federal Government. According to the Act, all lands in which minerals have been found in commercial quantities shall be acquired by the Federal Government in accordance with the Land Use Act. In addition, the Act seeks to protect the interests of host communities by making provisions for compensation to be payable to owners/occupiers of land where exploration or mining activities result in the disturbance of surface rights, destruction of land and property or loss of title to land. The Act further creates environmental obligations on holders of mineral titles. This is aimed at containing the impact of exploration and mining operations on the environment. The key provisions of the Act are as follows:

a) Establishment of specialized departments in the Ministry for Mines and Steel Development (MMSD), charged with the responsibility of general supervision of activities in the sector to ensure compliance with the Act
b) Establishment of the Mining Cadaster Office (MCO) for the administration of mineral titles and maintenance of records
c) Provision for the mechanism of dispute resolution
d) Provision of incentives for investment in the solid mineral sector

3.1.2. Land Use Act of 2004

The Land Use Act vests all land in the territory of each State in Nigeria solely in the Governor of the State who holds such land in trust for the people and administers the same for the use and common benefits of all Nigerians following the provisions of the Act. This excludes lands vested in the Federal Government or its agencies, such as lands with mineral deposits. The Governor is responsible for allocation of land in all urban areas to individuals residing in the State and to organizations for residential, agriculture, commercial and other purposes, while similar powers concerning non-urban areas are conferred on Local Governments.

An important implication of the Act is that while the State and local governments do not have powers to administer lands with mineral resources, they have the power to enable proper infrastructural development, such as access roads, around these locations to make mining attractive to operators in the State. This allows policy space for State governments to drive solid mineral industry development in their States.

3.1.3. The National Minerals and Metals Policy 2008

The Minerals and Metals Policy was designed with the understanding that Nigeria is not taking full advantage of its mineral resources. The policy seeks to create an enabling environment for minerals exploration and mining in Nigeria, with the aim of enhancing private sector leadership in the development of the mining industry.

The policy envisions the transformation of Nigeria's solid minerals industry into an irresistible destination for global capital, resulting in mining foreign direct investments. The policy led to the restructuring of the Ministry of Mines and Steel by establishing four technical units – Mining

Cadastre Office, Mines Inspectorate Department, Artisanal and Small-Scale Mining Department, and Mines Environmental Compliance Department – discussed later. The specific objectives of the policy include the following.

a) Achieve a sustainable increase in GDP contribution by the minerals sector
b) Provide a long-term export policy that would guarantee stability with a view to providing an incentive for investment in large scale commercial mining activity
c) Establish a transparent licensing regime
d) Formalize ASM operators
e) Ensure adherence to environmental best practices and encourage a transparent mining
f) title and permit system
g) Promote a good relationship with the national economy by encouraging the use of domestic metal products for the development of the nation's infrastructure.

3.1.4. Nigerian Minerals and Mining Regulations 2011

The Minerals and Mining Regulations were designed by the Ministry of Mines and Steel to establish a coordinated and accountable solid minerals industry in Nigeria. The regulations also seek to eliminate discretionary grants of minerals titles and sets outs rules, procedures and processes for the acquisition of mineral titles by local and foreign investors. The regulation specifies that mineral titles can be obtained in Nigeria through one of the mining titles available in the country by utilizing priority application or competitive bidding.

3.1.5. Companies and Allied Matters Act (CAMA) 2004

CAMA 2004 is the existing legislation that regulates company formation and operation in Nigeria, including companies operating in the solid minerals industry. It provides that no foreign company may carry on business in Nigeria unless it incorporates a local subsidiary in the country. The Nigerian Minerals and Mining Act 2007 incorporates the provision of the CAMA 2004 by requiring that no person shall be qualified for the grant of any mining title unless the person is a body corporate duly incorporated under CAMA 2004.

Section 331(2) of the Act requires all registered companies in Nigeria to keep accounting records in a manner sufficient to show and explain the transactions of the company and, as such disclose

with reasonable accuracy at any time, the financial position of the company. The Act further requires that the annual audited financial Statements of companies operating in Nigeria must be prepared in compliance with the International Financial Reporting Standards (IFRS).

Part XII requires all companies to file their annual returns, which shall comprise the audited financial Statements (AFS) with the Corporate Affairs Commission (CAC) and the Securities and Exchange Commission (SEC) for publicly quoted companies.

3.1.6. Nigeria Extractive Industries Transparency Initiative (NEITI) Act 2007

The NEITI Act was enacted in 2007 to provide legislation for the implementation of the Extractive Industries Transparency Initiative (EITI) in Nigeria. The Act provided for the establishment of NEITI with the following objectives:

a) Ensure due process and transparency in the payments made by all extractive industry companies to the federal government of Nigeria and statutory recipients
b) Monitor and ensure accountability in the revenue receipts of the federal government from extractive industry companies
c) Eliminate all forms of corrupt practices in the determination, payments, receipts and posting of revenue accruing to the federal government from extractive industry companies
d) Ensure transparency and accountability in the application of resources from payments received from extractive industry companies
e) Ensure conformity with the principles of the EITI

3.2. Regulatory Authorities

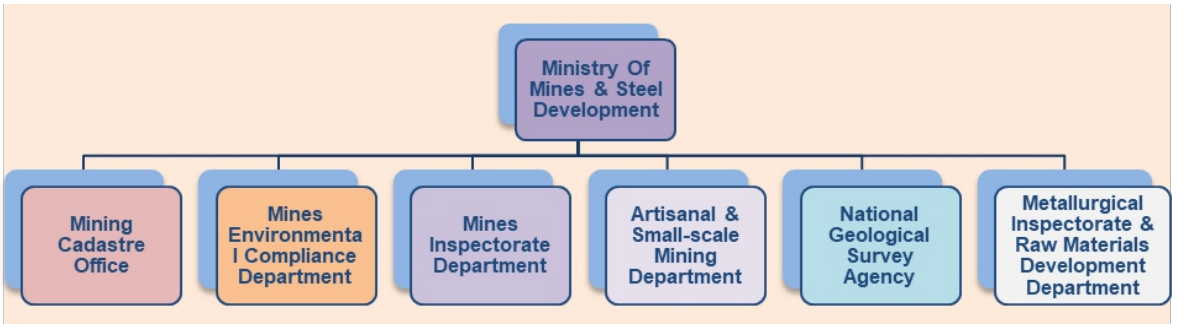
3.2.1. Ministry of Mines and Steel Development (MMSD)

The Ministry of Mines and Steel Development was established as the Ministry of Solid Mineral Development in 1995. In 2007, the agency changed its name as part of a strategic move to build its reputation and restore the solid minerals industry.

The ministry is responsible for the administration of the mining industry with the following functions.

a) Formulating policy regarding minerals prospecting, quarrying and mining
b) Providing information and knowledge to enhance investment in the sector
c) Regulating operations in the solid minerals sector
d) Generating appropriate revenue for the government through royalties collection and other fees

Figure 9: Structure of the Ministry of Mines and Steel Development



Source: NODAC Consulting

The MMSD is the government agency that interfaces with operators in the solid minerals industry. The Ministry functions as a regulator of the mining industry, and facilitates the provision of baseline geoscience information. Figure 9 shows the key departments and agencies in the MMSD through which the Ministry carries out its objectives of solid minerals industry development.

3.2.2. Mining Cadastre Office (MCO)

The Mining Cadastre Office (MCO) is an autonomous body responsible for administering mineral titles in Nigeria. The MCO processes mineral title applications, including exploration licenses, mining licenses, quarrying licenses, and small-scale mining licenses. Key responsibilities of the MCO include the following.

a) Issuing, suspending and revoking mining titles, subject to government's rules and regulations
b) Receiving and disposing of applications for transfer, renewal, modification and relinquishment of mineral titles
c) Maintaining a chronological record of all applications for mineral titles in a priority order

3.2.3. Mines Environmental Compliance Department (MEC)

The Mines Environmental Compliance Department creates environmental procedures and requirements applicable to mining activities. The department also monitors and enforces compliance with all environmental requirements and obligations as required of mineral title holders. Key responsibilities of MEC include the following.

a) Establish environmental procedures and requirements applicable to mining operations
b) Review all plans, studies and reports required to be prepared by holders of mineral titles in respect of their environmental obligations under the Act
c) Monitor and enforce compliance by holders of mineral titles with all environmental requirements and obligations as required by law
d) Maintain regular environmental audits to ensure the adoption of environmentally sound practices in all mining operations

3.2.4. Mines Inspectorate Department (MID)

The Mines Inspectorate Department (MID) is responsible for all operations relating to the exploration, evaluation, mine development and production. The department supervises and enforces title holders' compliance with all safety regulations prescribed under the Nigerian Minerals & Mining Act and any other applicable law. The major responsibilities of the MID include:

a) General supervision of mining, quarrying and explosives matters to ensure safe mining operation and enhance high production of minerals and revenue generation
b) Development of a database of all mining and quarrying operators
c) Ensuring preparation of mineral returns by operators as prescribed by the regulations
d) Supervision and enforcement of compliance by mineral title holders with all work programmes and safety regulations prescribed under the Act and any other laws in force
e) Production of records of all mineral production nationwide

3.2.5. Artisanal and Small Scale Mining Department (ASMD)

This department is responsible for the formalization of the operations of Artisanal and Small Scale Miners and the provision of extension services in mining. The responsibilities of ASMD include the following.

a) Organize, support and assist small scale mining operations
b) Provide extension services to mining cooperatives on exploration, exploitation, mineral processing, entrepreneurial training, environmental management, etc.
c) Improve sustainable livelihood in ASM communities

3.2.6. National Geological Survey Agency (NGSA)

The National Geological Survey Agency provides geosciences information and knowledge for the sustainable development of solid minerals in Nigeria. The agency is charged with carrying out detailed geological investigations, including analytical and laboratory works, photogeology, core drilling, well-logging, geo-statistics, and other mineral reserve estimation and valuation. The major responsibilities of the NGSA are as follows.

a) Promote the search for and exploitation of minerals in Nigeria
b) Conduct investigation and render specialized geological services to the public and private institutions
c) Compile comprehensive data and information on the geology and geophysics of various solid minerals in the economy
d) Carry out detailed geological investigations, including analytical and laboratory works, photogeology and other interpretations, core drilling, well-logging, geo-statistics, and other mineral reserve estimations and valuations.

3.2.7. Metallurgical Inspectorate and Raw Materials Development Department

The Metallurgical Inspectorate and Raw Materials Development Department is responsible for the steel industry in Nigeria. Among its statutory functions are the following.

a) Set up standards for steel production in Nigeria, in cooperation with appropriate bodies

b) Produce, publish and circulate pamphlets/booklets of steel standards/codes with detailed chemical and physical properties
c) Produce, publish and circulate safety manuals and regulations to steel producers and foundry operators
d) Establish research laboratories for testing to ensure local and imported metallurgical products are of the right quality, as well as importation of the right quality metallurgical raw materials into the country
e) Liaise with integrated steel plants and foundries in the country to obtain specifications of all their raw materials input
f) Promote joint venture projects for the development of metallurgical raw materials such as iron ore and ferrous alloy materials, coking coal, limestone/dolomite, fluorite, bauxite, refractory clays foundry raw materials, etc.

3.3. Types of Mineral Titles and Licenses

To be able to engage in mineral exploration and extraction in Nigeria, a mineral title or license must be obtained from the Mining Cadaster Office. Mining licenses could be granted to any citizen of Nigeria, a body corporate duly incorporated under the Companies and Allied Matters Act (CAMA), a mining Cooperative, and where applicable a holder of the relevant prior license.

An exploration license or mining lease can be acquired in Nigeria through competitive bidding or on individual request. In the case of competitive bidding, the government consolidates various mineral locations into blocks and offers the blocks for sale to international and local investors with sufficient financial and technical capabilities to carry out mining operations. The different kinds of licenses and leases that could be granted by the government are discussed below.

3.3.1. Reconnaissance Permits (RP)

An RP gives the holder the right to obtain access into, enter or fly over any land within the territory of Nigeria available for mining purposes, and to search for mineral resources on such areas on a non-exclusive basis. The permit further gives the holder the right to obtain and remove surface samples in small quantities. An RP is issued for a one year period subject to annual

renewal, provided the conditions of the Nigerian Minerals & Mining Act and any regulations pursuant to the Act are met. More so, the permit is non-transferable.

The conditions for the grant of an RP includes the following

a) Non-Exclusivity
b) Does not give right to drill, excavate or apply other sub-surface techniques
c) Holder should compensate users of land for damage to land and property and pay the subscribed fees
d) Reconnaissance activities do not constitute land use right under the Land Use Act

3.3.2. Exploration License (EL)

EL gives the holder an exclusive right to to specific minerals on the land within the area of the license. The license is granted in respect of an area not more than 200 square kilometers and for three years subject to renewal of two more years each. An EL holder has the right to be granted one or more Small Scale Mining Lease, Mining Lease or Quarry Lease in respect of any part of the exploration area provided the holder complied with all the obligation of the exploration license. The holder is further allowed to conduct bulk sampling and testing, export, and sale of mineral resources not exceeding established limits.

3.3.3. Mining Lease (ML)

An ML, amongst other things, gives the holder the right to obtain access and enter the Mining Lease Area, the exclusive use, occupation and the execution of mineral exploration within the Mining Lease Area. The holder also has the right to market, sell and export mineral products from mining and the right to use water, wood and other resources on the surface of the land.

The lease is typically not granted in respect of an area on an Exploration License or Small Scale Mining Lease except to the holder of the Exploration License of Small Scale Mining License. An ML is valid for 25 years and is renewable for a maximum period of 20 years.

3.3.4. Quarry Lease (QL)

QL is granted in respect of a land area and the duration does not exceed five years unless renewed. The lease gives the holder the right to conduct quarry operations on the land within the area of the lease and to remove and dispose of any mineral specified in the lease. The quarry area is less than or equal to 5 square kilometers.

3.3.5. Small Scale Mining License (SSML)

This license is granted in respect of an area not less than five acres and not more than three square kilometers. An SSML normally has other conditions determined by the Small Scale and Artisanal Mining Department of the Ministry of Mines and Steel Development. The holder of the lease has the right to carry out small-scale mining operations – that is mining operations involving low-level technology – within the title area.

3.4. Transfer of Mineral Title

Under the Nigerian Minerals & Mining Act, a Mineral Title is transferable subject to the approval of the Minister for Mines and Steel Development, and the registration of the transfer with the MCO. In addition, rights arising from the mineral title or permit that are transferable can be wholly or partially assigned, sub-leased, pledged, mortgaged, charged, hypothecated or subject to any security interest. Furthermore, the approval of the MCO is not required for an assignment to an affiliate where the obligations of the affiliate are guaranteed by the assignor or by a parent company.

3.5. Revocation of Mineral Title

The Minerals & Mining Act specifies conditions under which a mineral title may be revoked. These include where the holder:

a) Is convicted of an offense by a court of competent jurisdiction
b) Breaches any provision of the Act or regulation pursuant to the Act
c) Is declared insolvent or bankrupt by court of competent jurisdiction

d) In the case of a Small Scale Mining Lease or Mining Lease, the holder wholly discontinues operations under the lease for a continuous period of six months

The procedure for title revocation requires that the Minister for Mines and Steel Development issue written advice to the titleholder. After 30 days of notice of intention to revoke title, if the holder fails to remedy any breach warranting the notice or remove the grounds for the revocation then the mineral title gets revoked.

3.6. Fiscal Regime

3.6.1. Taxes

Tax obligations of companies engaged in mining activities in Nigeria is based on the recently passed Finance Act, 2019; the Companies Income Tax Act (CITA); and Laws of the Federation (LFN) 2007, as amended. Partnerships and Individuals carrying out mining in Nigeria are required to pay tax under the Personal Income Tax Act (PITA) and the LFN 2007, as amended.

All incorporated companies in the solid minerals industry are required to pay the following taxes:

a) Companies Income Tax
b) Education Tax
c) Value Added Tax
d) Withholding tax
e) Capital Gains Tax
f) Stamp Duties

3.6.2. Royalties

The Minerals and Mining Regulations 2011 requires companies involved in mining activities with a mineral title other than reconnaissance permit to pay royalty at a rate of 3 – 5% on ad valorem basis depending on the type of mineral. Subject to the approval of the Federal Executive Council a mineral titleholder may be granted a concession by the Minister for deferment of royalty payment on any mineral for a specified period.

3.6.3. Fees

In addition to the taxes and royalties, companies conducting solid mineral mining in Nigeria are subject to a number of fees, as highlighted below.

a) Annual Service Fees: Payable to the Mining Cadaster Office (MCO) on the anniversary of the issuance of the mineral title
b) Annual Surface Rent: to be paid to the owner or occupier of the land, subject to the approval of the Minister. It is also subject to review by the Minister every five years.
c) Other Application & License Fees: The MCO and relevant State or local governments may impose other fees/levies on the mining entities.

3.7. Fiscal Incentives in the Solid Minerals Industry

The Nigerian Minerals and Mining Act provides several incentives for firms engaged in solid mineral mining in Nigeria. The incentives are aimed at attracting investments in the sector and making the solid minerals industry globally competitive. The incentives include the following.

a) Exemption from payment of customs and import duties in respect of plant, machinery, equipment and accessories imported specifically and exclusively for mining operations. However, the plant and equipment can only be disposed of locally upon payment of the applicable customs and import duties.
b) The tax relief period for a company with a mineral title shall commence on the start date of operation and renewable for an additional two years.
c) In cases where the holder of a mineral title earns foreign exchange from the sale of his minerals he may be permitted by the Central Bank of Nigeria to retain a portion of his foreign exchange earnings in a foreign exchange domiciliary account for use in acquiring spare parts and other inputs required for the mining operations which would otherwise not be readily available without the use of such earning.
d) Grant of personal remittance quota for expatriate personnel is free from any tax imposed by any enactment for the transfer of external currency out of Nigeria.
e) Annual indexation of unutilized capital allowance carried forward by 5% for mines that commenced production within five (5) years from the date of enactment of the Act.

f) Accelerated capital allowance on mining expenditure (95% initial allowance and retention of 5% until asset is disposed).
g) Actual amount incurred out of reserves made for environmental protection, mine rehabilitation, reclamation and mine closure cost shall be tax deductible, subject to certification by an independent qualified person.
h) A holder of a mineral title shall be guaranteed free transferability through the Central Bank of Nigeria for the payment or servicing certified foreign loan, and the remittance of foreign capital when an asset is sold or liquidation occurs.

Our survey reveals that the stringent requirements and administrative procedures attached to these incentives make it hard for operators, particularly the medium and small scale miners, in the industry to take advantage of them.

3.8. Government Involvement in the Solid Minerals Mining

3.8.1. Federal Government Participation

The Nigerian mining sector reforms of 2005 and 2006, which culminated in the enactment of the Mineral and Mining Act, 2007, redefined the role of the Nigerian government as the administrator-regulator of the mining sector. Ownership of assets and operation of the sector is therefore carried out by the private sector. As a result, the Nigerian government privatized the assets of the Nigerian Mining Corporation and Nigerian Coal Corporation and currently has no operational stake in any company in the solid minerals industry.

3.8.2. State Governments' Role in the Solid Minerals in Ebonyi, Ekiti and Taraba

Although the regulation of the solid mineral industry is carried out by the federal government of Nigeria through the Ministry for Mines and Steel Development, there are still some roles to be played by the respective State governments. For instance, there is a need for collaboration between the State and federal government on issues such as infrastructure development, conflict resolution, and environmental compliance to ensure the smooth operation of mining activities.

Ebonyi, Ekiti and Taraba States each have dedicated offices/ministries that oversee the activities of solid minerals mining in the States. These offices play critical roles for the State because if

they succeed in attracting more solid minerals investments to the State, more internally generated revenue could be derived from fees and levies the State government charges mining corporations. Also, more jobs could be created in the State, thereby promoting the wellbeing of indigenes. The following sections highlight the roles of these offices in the respective States.

3.8.3. Ebonyi State Ministry of Solid Minerals

The Ebonyi State Ministry of Solid Minerals is charged with the responsibility of supervising the activities of firms operating in the solid minerals industry, as well as advising the State government on matters relating to solid mineral development, with the aim of increasing internally generated revenue. The roles of the ministry include the following:

a) Resolution of dispute among investors and host communities
b) Attracting investors and registration of investors
c) Supervision of mineral deposits
d) Collection of development levies from quarries

3.8.4. Ekiti State Minerals Resources Development Authority

The Ekiti State Office for Solid Minerals Resources is charged with the responsibility of creating an enabling business environment for solid minerals investors, and encouraging the participation of investors from Nigeria and overseas in mining activities in Ekiti. The office aims to foster the development of solid minerals value chain that goes beyond just mineral exploration and mining.

To ensure the achievement of its objective, the Ekiti State Minerals Resources Development Authority has created a Company, Fountain Solid Mineral Development Company (FSMDC), to enter joint venture mining activities with local and foreign operators. The idea behind the program is that since the FSMDC has already secured mining licenses from the Federal Government, new investors that enter a joint venture with the State-backed company can immediately begin mining activities without the hurdle of obtaining new licenses. More so, it is hoped that by partnering with the State government, investors would consider their investments more secure, which reduces the risks inherent in mining, thereby making mining finance easier to secure.

Our survey further reveals that other initiatives being pursued by the State government to promote mining activities include leasing mining equipment owned by the government.

3.8.5. Taraba State Ministry of Environment

Taraba State does not have a government agency charged with the specific responsibility for developing the State's solid minerals industry. However, the Ministry of Environment in Taraba has some responsibilities that allow it to monitor the activities of firms engaged in solid mineral mining, as well as promote the development of the industry. The specific roles of the ministry related to solid mineral industry supervision include the following.

a) Environmental protection
b) Control of illegal mining
c) Solid minerals exploration and exploitation

In recent times, a number of achievements recorded by the ministry include the following.

- Identification of several solid minerals – Gold, Gemstone, Saphire Barite, Columbite – in different parts of the State
- The ministry undertook a satellite minerals survey of four block areas within the State
- Incorporation and registration of the Taraba Solid Minerals Development Company Limited (TSMD), which has acquired solid minerals development titles over 16 different minerals sites in the State

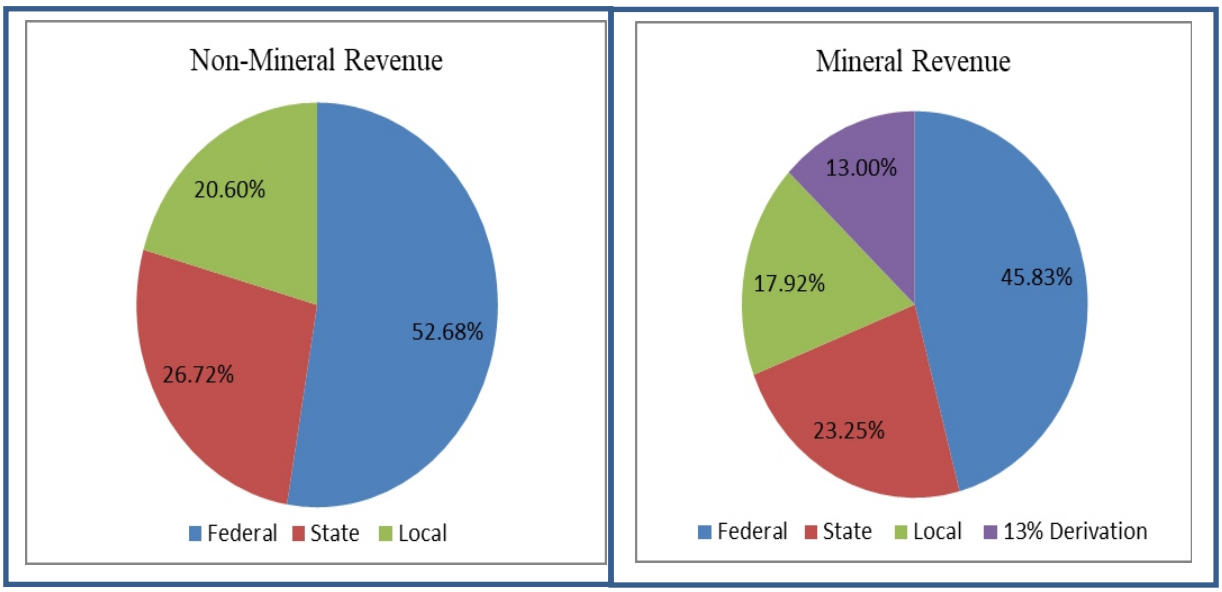
3.9. Solid Minerals Revenue Allocation

Section 162 of the 1999 Constitution of the Federal Republic of Nigeria established the Federation Account, a pool account maintained by the Accountant General of the Federation and domiciled with CBN. The proceeds – including revenues from the solid minerals – of the account are disbursed by the Federation Account Allocation Committee every month to the federal, State and local governments in line with the approved sharing formula as formulated by the Revenue

Mobilization, Allocation and Fiscal Commission (RMAFC). The current revenue allocation formula for non-mineral and mineral revenues are depicted is depicted in Figure 10.

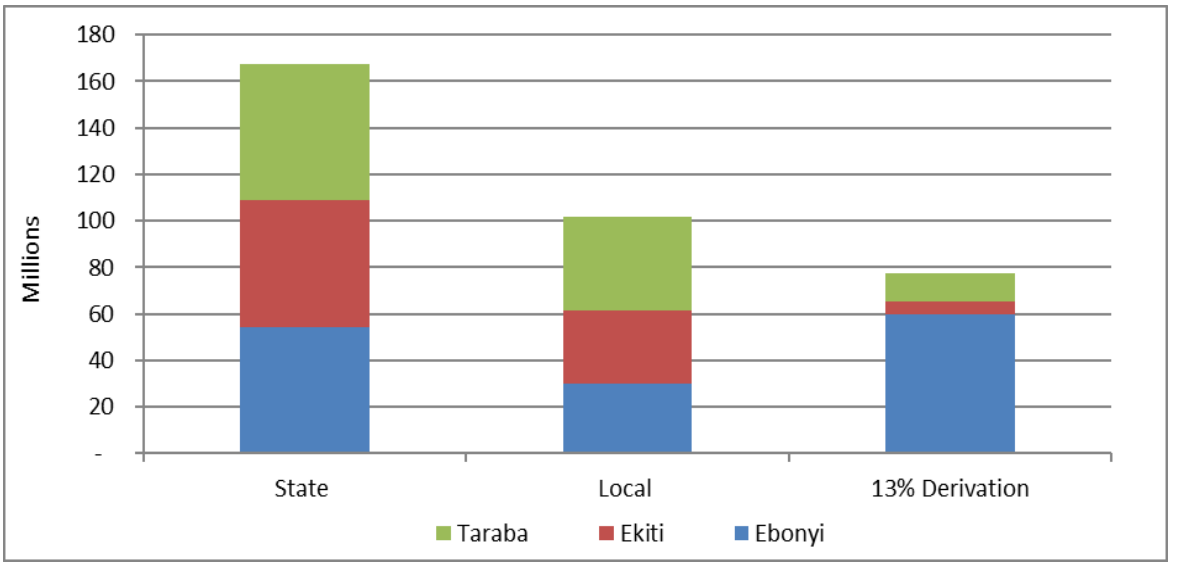
As Figure 10 shows, Nigeria has a different formula for sharing revenue from mineral and non-mineral sources. This is based on Section 162 of the 1999 Constitution, which States that, as a first-line charge, an amount not less than 13% accruing to the Federation Account directly from any natural resources shall be distributed to beneficiaries where the minerals are mined, on the principle of derivation. While the additional 13% of mineral revenue that goes to States the revenue is derived from serves as compensation for the economic ills associated with mineral extraction, it also creates incentives for States like Ebonyi, Ekiti and Taraba to support mineral mining and promote initiatives that would attract solid mineral investments and promote the development of the industry in the States.

Figure 10: Mineral and Non-Mineral Revenue Allocation Formula



Source: NODAC Consulting; Based on values in NEITI 2019 Solid Minerals Industry Audit Report

Figure 11: Revenue Received by Ebonyi, Ekiti and Taraba States from Solid Minerals in 2016



NODAC Consulting; Based on values in NEITI 2018 Solid Minerals Industry Audit Report

Figure 11 shows the amount of revenue from solid minerals that were allocated to Ebonyi, Ekiti and Taraba States governments as well as the local government in the respective States in 2016. The figure also shows the allocation to the States based on the principle of 13% derivation. Out of a total of the ₦9.9 billion solid mineral revenue generated in Nigeria in 2016, ₦4.5 billion was allocated to the federal government; a total of ₦2.3 billion was allocated to State governments; a total of ₦1.8 billion was allocated to local governments and another ₦1.3 billion was allocated to States based on the principle of derivation.

It can be seen from

Figure 11 that while Ebonyi and Ekiti, got about the same amount in State allocation and local government allocation, Ebonyi got the highest amount of the three States based on the principle of derivation. In particular, while Ebonyi State received ₦59.8 million, Taraba and Ekiti received ₦12.6 million and ₦5.4 million. The significantly higher derivation amount received by Ebonyi is consistent with its higher solid minerals production numbers shown in Figure 5. However, it is surprising to find that Ekiti State received lower solid minerals revenue than Taraba based on the principle of derivation, although Ekiti had slightly higher mineral production numbers in Figure 5.

COMMUNITY DEVELOPMENT IN THE MINING COMMUNITIES

4.1. Overview

4.1.1. Community Development Agreements (CDAs): nature and objectives

The fact that extractive mineral projects have a life span, which is tied to the depletion of the minerals, places a demand on governments in terms of what they want to achieve from extractive activities and the mix of regulatory instruments and other tools through which these objectives will be achieved within the life span of the project. Even when governments do not start with defined development objectives for host communities of mining projects, they often maintain the primary objective of collecting fiscal revenues from extractive projects and taxes from extractive companies with the aim of committing such to several obligations, including large infrastructure projects. In recent times, governments have been shifting their attention to establishing projects that benefit local communities while extractive industries remain in operation in such communities. The MMSD Project defines Sustainable Development at the Community Level as follows:

> *At the local level, sustainable development is about meeting locally defined social, environmental, and economic goals over the long term. Interactions between the mine and community should add to the physical, financial, human, and information resources available—not detract from them. The challenge is to ensure that the effects of interactions are regarded as positive by those affected locally as well as by the promoters of the project, and that communities develop in ways that are consistent with their own vision. This may be realized through, for example, the provision of social services, income, or skills development (MMSD, 2002, pp. 198)*

In achieving the objectives of sustainable development at the community level, governments need to decide whether they want to allow the mining companies to define their role voluntarily or legislate the roles as compulsory obligations and requirements. Whether a government wants to impose mandatory requirements or encourage mining companies to voluntarily commit to developing their host communities, one way that governments have to achieve sustainable

development at the local level is to require extractive companies to explore community development agreements (CDAs) with their host communities. These CDAs can provide a veritable means to define mutually agreeable and desired features of project-assisted development that will help manage expectations on both sides (Otto, 2018). The use of CDAs or other community development tools embedded in mining legislations have become more prevalent in recent times as governments are now moving away from expecting that companies will voluntarily commit to community development.

Community Development Agreements (CDAs) provide a mutually beneficial and yet sustainable approach to ensuring a strong relationship between governments, companies, and mining communities (World Bank, 2012). The World Bank. (2012, pp. 5) describes the core goals of the CDAs as follows:

a) Improving relationships between companies, communities, governments, civil society, and other stakeholders; and

b) Promoting sustainable and mutually rewarding benefits from mining projects, including pro-poor initiatives and other strategies which may be beyond the immediate scope of impacts for a project.

The drive by many governments, companies, and host communities to establish CDAs is informed by the idea that extractive industries should contribute meaningfully to the long-term development goals of affected communities. Also, this expectation falls within the purvey of Corporate Social Responsibility (CSR) objectives that companies consider as a part of their overall business and sustainability strategies. This is particularly the case in countries where mining or environmental law requires community development responsibilities from companies.

While the notion of CDAs has been mainly associated with an expectation that companies operating in mining communities should ensure that beneficial development initiatives are transferred to communities where they operate, governments also have an obligation to support development in such communities. Governments have a role to play by ensuring that revenues derived from mining and exploration activities (through taxes, royalties, etc.) are channelled back to affected communities. In this regard, governments are usually expected to go beyond their everyday obligations to paying special attention to the plight of mining communities by enhancing local infrastructure and services.

The roles of governments and extractive companies in community development vary both across countries as well as across projects. The specific roles depend on the historical context and the issue of sustainability. For instance, many extractive companies have historically considered their host communities in terms of how the communities can contribute to their operations through being, for instance, a source of employees (usually low skilled employees), housing, among other purposes, rather than how they (i.e., extractive companies) can be a source of development to the communities. The issue of sustainability comes to question when one considers that mining operations might seize at some point, causing the extractive companies to leave their host communities. This reality suggests that any extractive company that plans to develop a mining community will have to consider such a commitment within the context of the time horizon of its planned operations in the community (Otto, 2018).

It is important to add that CDAs embedded in existing legislations are not the only ways through which the government can impose community development requirements on companies. Another way of ensuring community development is the use of a *State agreement.* A State agreement is entered between a holder of rights of extraction, and the government sets out mutually agreed obligations and rights of the parties. However, the relevance of project-specific State agreements have diminished in the past few decades as the requirements and objectives of such agreements have found their way into legislations relating to mining (mining law, environmental law, labour law, income tax law, etc.).

4.1.2. Community Development Agreements (CDAs): legal foundations

The legal foundations for the establishment of CDAs are informed by the fundamental obligation for the protection of the rights of indigenous peoples at international law. Indigenous peoples are often considered some of the most disadvantaged societal groups whose regime of rights should extend beyond the provisions of universal human rights protections. One of the most prominent of these set of protections is the principle of free, prior, and informed consent (FPIC)[2]. This principle obliges governments and companies only to undertake projects for which communities have been adequately informed of the potential positive and negative consequences and have

[2] See the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP); International Labour Organisation, Indigenous and Tribal Peoples Convention, 1989 (No. 169)

given consent devoid of coercion or any pressures or under interferences before the commencement of the project (Loutit, 2016). In the spirit of this legal principle, consultation with indigenous people should be carried out in the process of obtaining the consent of indigenous people before undertaking projects[3].

4.1.3. Community Development Agreements (CDAs) under the Nigerian Mineral and Mining Act (NMMA), 2007

As is the case with many CDAs in many countries, the CDAs in the Solid Minerals Sector is aimed at promoting a harmonious and mutually beneficial relationship between the Mining Companies and their host communities. Section 116(1) of the Nigerian Minerals and Mining Act (NMMA), 2007 provides the basis for the establishment of CDAs. The Act makes it a mandatory requirement for all mining companies intending to establish a mining site to enter into a development agreement with various stakeholders and people who will be affected by their proposed mining operations. The Act requires the CDAs and other related agreements to be put in place before mining activities commence in host communities.

The NMMA 2007 is specific about the nature of a development project that the agreements should include. Undertakings of the agreement are to include social and economic contributions that the project will make to the sustainability of host communities. The Act stipulates that the agreement need to address some or all of the following issues as may be relevant to host communities:

a) Educational scholarship, apprenticeship, technical training and employment opportunities for indigenes of the communities;

b) Financial or other forms of contributory support for infrastructural development and maintenance such as education, health or other community services, roads, water, and power;

c) Assistance with the creation, development and support to small scale, and micro-enterprises

d) Agricultural product marketing

[3] International Labour Organisation, Indigenous and Tribal Peoples Convention, 1989 (No. 169), Art. 6(2).

e) Methods and procedures of environment and socio-economic management and local governance enhancement

The Act envisages a periodic review process for the CDAs. Section 116(5) stipulates that CDAs shall be open to review every 5 years by all parties involved in establishing the agreement. Similarly, the Act expects that CDAs shall define appropriate guidelines for consultation and a monitoring framework that enables community participation in the planning, implementation, management and monitoring of activities carried out under the agreement between mineral title holders and host communities.

While the NMMA 2007 was established with good intentions, procedural gaps exist in the Act which may have serious consequences for the successful implementation of the Act. Some of these procedural gaps are as follows:

a) The relevant section on CDA did not prescribe the mechanism for ensuring inclusive and participatory process in developing the agreement such that various groups in the community feel adequately represented

b) The Act is vague about the expected commitment from parties towards implementing the agreements

c) The provision that allows a periodic review of the agreement only after 5 years is not flexible enough to accommodate the frequency with which circumstance change in communities and the need to regularly manage grievances in the process of implementing the agreement. (See ICMM Good Practice Guide: Indigenous People and Mining, 2010 for the standard requirements of a CDA)

d) The Act does not indicate appropriate sanctions that should be imposed on mining firms in the event they fail to fulfil their obligations as contained in the CDA

4.2. Community Development Agreements in Ebonyi, Ekiti and Taraba States

4.2.1. Existence and Adequacy

Our survey on the State of affairs in mining communities in the three States shows that CDAs exist in host communities in Ebonyi and Ekiti States. However, community leaders in two host communities in Taraba State report that there are no CDAs in their communities. An NGO leader in Taraba State nonetheless confirms the existence of one CDA that he is aware of in Mambilla Plateau, Sadauna LGA of Taraba State. The NGO leader also added that such agreements are significantly few in Taraba State. Some of the elements of the CDA in communities where they exist include the provision of scholarships to an indigene of the community, employment of indigenes, the building of basic infrastructure such as borehole, cash donations to community groups, among other items. In many cases, community stakeholders are not a part of the process of deciding on projects to be implemented.

NGO players in the various States generally report a low level of involvement of the people of the community in the process of developing the CDAs. They report that either the process of developing the CDAs is not participatory enough or that the implementation process has not been satisfactory. At best, only a few privileged individuals in the communities are a part of the process of generating the CDAs. This is the case for even communities where implementation is considered to have relatively been successful.

We also find that only community leaders in a few communities consider the CDA adequate in meeting their needs. Others express hope that opportunities will come in the future to amend the agreements to better address their needs. Specifically, in Ebonyi State, we find that community leaders show more readiness to confront any deviations from the terms of the Agreement than we find in other States.

4.2.2. Quality of Implementation

Community leaders in Ebonyi State report that some projects (such as roads, electricity, and hospitals) have been undertaken by particularly large miners in their communities. However, the case is the opposite for Ekiti and Taraba States, where community leaders insist they are yet to

see any projects carried out by mining companies. However, we are not aware whether the reason for this is related to the fact that these States do not yet have big mining investors or operators, or whether mining operations are relatively new in the communities where the community leaders come from.

4.2.3. Investor-community relations in Ebonyi, Ekiti and Taraba States

Most community leaders interviewed report that some level of benefits have accrued to their communities due to the operation of miners. This benefit is mainly through employment opportunities into low skill positions within the mining operations that their indigenes have enjoyed in their community. The report from NGO leaders operating in these communities regarding investor-community relations has been mixed. Some report a seemingly cordial or balanced relation while others posit that the balance of power has been skewed in favour of the investor, especially for communities where larger miners operate.

Most of the community leaders accuse artisanal miners of being responsible for the majority of harm to the environment through mining operations in their communities.

4.3. Regulating Mining Activities in the Communities

Nearly all community leaders believe that the activities of artisanal miners need to be regulated appropriately. Some of them advocate for more responsibility for the States and greater involvement of communities in the area of regulation of mining activities of artisanal miners. Most of them believe the artisanal miners have not been regulated sufficiently. They also point to the potential of generating higher tax revenues from them in the occasion that proper regulation is enforced.

SECURING MINING SECTOR ENVIRONMENTS

5.1. Regulations

5.1.1. Environmental Laws and Regulations at the Federal Level

The main laws regarding the environment and mineral mining activities in Nigeria are the Environmental Impact Assessment (EIA) Decree No. 86 of 1992[4] and NMMA 2007. The EIA Decree mandates the Ministry of the Environment to complete a pre-construction review of activities raising environmental concerns. Similar to the provisions of Section 119 of the NMMA 2007, the EIA Decree prescribes that EIAs must contain detailed description of activities to be undertaken, the potentially affected environment, and the practical alternatives, together with an assessment of likely or potential environmental impacts, identification and documentation of mitigation measures, and an indication of gaps in knowledge. Requirements in the EIA Decree specific to the mining sector and activities include a surface infrastructure plan (to include a water pollution management), and surface water, groundwater, and air pollution analysis. The Federal Government of Nigeria, in 2007, also created the National Environmental Standards and Regulation Enforcement Agency (NESREA) Act, which replaced the Federal Environmental Protection Agency (FEPA) as the primary law governing environmental protection.

Mining operations must also comply with related environmental regulations that go with the environmental laws and policies. These regulations are established and administered by the Ministry of the Environment through NESREA. Through the instrumentality of the NESREA Act, the Ministry of Environment is mandated to pass regulations to protect public health or welfare. One of such regulations related to the mining sector is the regulation put in place in 2009 to govern Pollution Abatement in Mining and Processing of Coal, Ores and Industrial Minerals. These sets of regulations target the minimization of pollution from the mining and processing of coal, ores, and industrial minerals and contain emissions limits for specific pollutants, among other things.

[4] ENVIRONMENTAL IMPACT ASSESSMENT DECREE 86 (1992), http://www.nigeria-law.org/Environmental%20Impact%20Assessment%20Decree%20No.%2086%201992.htm. [Short cite: ―EIA Decree‖]

In many cases, due to the nature of environmental issues, regulatory and enforcement agencies such as the NESREA apply pre-emptive measures to achieve compliance with relevant legislative requirements. However, full enforcement powers can be applied to where voluntary compliance is not forthcoming. Some of the key instruments of enforcement by NESREA are:

- Inspection.
- Compliance monitoring.
- Negotiation.
- Legal action.
- Prosecution.

Some of the methods of enforcement are:

- Issue of permits and licenses.
- Issue of prohibition and enforcement notices.
- Variation of license conditions.
- Implementing the "polluter pays" principle.
- Suspension and/or revocation of permits and licenses.
- Injunction and carrying out of remedial works.

As the main implementing and enforcement agency for environmental matters at the Federal level in Nigeria, the Federal Ministry of the Environment also ensures that Nigeria complies with three international environmental agreements related to Artisanal Small-Scale Gold Mining (ASGM) namely the Minamata Convention, the Basel Convention, and the Strategic Approach to International Chemicals Management (SAICM).

5.1.2. Environmental Laws and Policies at the State Level

States in Nigeria also have environmental laws and regulations that affect mining activities. However, since "mine and minerals" fall within the exclusive legislative list of the Nigerian constitution, the NMMA 2007 and other laws made by the National Assembly, and its regulations would pre-empt most State regulation on mining operations.

Environmental agencies and laws that exist at the State level operate under some cooperative framework alongside the corresponding agencies and regulations at the federal level on most environmental matters. For instance, State environmental agencies share in the responsibility of monitoring and enforcement of the EIA processes as well as exercise authority on related environmental matters such as granting permits for certain activities that may affect the environment. In this principle of cooperative federalism, the NMMA 2007 requires the establishment of a Mineral Resources and Environmental Management Committee (MIREMCOs) for each State of the Federation, composed of the following representatives[5]:

- A representative of the Mines Environmental Compliance Department (to serve as chair)
- A representative of the Ministry responsible for land or mineral-related matters in the State
- The federal Mines Officer responsible for the State
- A representative of the State Ministry of Agriculture or Forestry
- A representative of the State Surveyor-General
- A representative of the relevant Local Government Council (when the committee is considering issues affecting a particular Local Government Area)
- A representative of the State Environmental Department or Agency
- A representative of the Federal Ministry of Environment in the State

Part of the responsibilities of the MIREMCOs is to discuss, consider, and advise on environmental issues as they affect the local interests of the States concerned. Other matters include approaches to the sustainable management of mineral resources and potential pollution

[5] Minerals and Mining Act (note 69), § 19.

and degradation of land. Additionally, when a dispute arises between mineral title holders and host communities, the MIREMCOs have a responsibility to settle such disputes.

While States may not have legal authority over mining activities, they can regulate environmental pollution in their States. In this regard, States have set up environmental management agencies to protect and improve the environment through the sensitization of communities and businesses to understand their responsibilities to the environment, among other activities.

5.1.3. Environmental Protection under the NMMA 2007

The NMMA 2007 provides for requirements that need to be put in place to ensure the protection of the mining sector environment. Firstly, Section 111 of the Act requires holders of mineral title to have regard to the effect of mining operations on the environment and take required steps to ensure that the necessary precautions are put in place to prevent pollution of the environment resulting from the mining operation. Secondly, Section 114 mandates the minister in charge of the environment at the Federal level to ensure that any grantee of a mining lease restores any area in which mining operation has been, is being, or is to be carried out, on or after the date on which this Act comes into operation. This is to ensure that mining environments, especially the land, is brought back to the condition which it was in before the commencement of the mining operations so that such environment can be put to other meaningful uses. Thirdly, the Act also places direct responsibilities on the mining operators for the protection of the environment where they operate. Section 116 requires every holder of mineral title to ensure the following to the best of its ability:

a) Minimize, manage and mitigate any environmental impact resulting from activities carried out under the 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.

For operators in various mining sites, the provision in the NMMA 2007 provides a set of guides to enable mining operators to comply with regulations to ensure that the environment is protected

from pollution, restored, or rehabilitated in the event of pollution or contamination occurring during mining operations.

5.2. Enforcement of Environmental Regulations in Ebonyi, Ekiti and Taraba States

5.2.1. Existing Environmental Concerns in Mining Sites

Our field surveys in Ebonyi, Ekiti and Taraba States show that many mining investors are aware of the range of environmental risks that mining activities pose to the communities where such activities are ongoing. For instance, these mining investors point to the Lead poisoning of water sources such as rivers and streams, and how this may lead to serious public health problems. Another point is the risk of erosion resulting from the existence of several mining pits, and felling of trees in mining sites which exposes the topsoil to erosion.

Representatives of regulatory agencies at the State level that were interviewed acknowledge glaring evidence of health risks posed to the communities by mining activities in the States. Their revelation shows that while they are aware of these environmental issues, enforcement has been largely weak. For instance, a government representative in Taraba State added that miners are being encouraged to close up pits as soon as they leave the sites. However, not much of this is done in very many cases. Regulators also blame the artisanal miners for most of the poor environmental practices that happen in affected communities. The regulators do not mention any strict enforcement measures taken against either artisanal miners or major mining operators or investors.

Mining investors raise the point about the environmental risks associated with their mining operations in the affected communities without a mention of the areas where they are taking precautions to ensure that the impact of their activities in the sites is mitigated. The NMMA 2007 imposes responsibilities on mining permit holders to ensure that the mining environment is restored during or after mining activities have been completed in mining sites.

5.2.2. Prospect for the Mining Sector in an Era of Environmental Sustainability

Most of the mining investors are aware of the global clamor for sustainable environmental approaches and solutions but do not expect a significantly damaging effect on their businesses in

the near future. Some of them insist such clamor for sustainable solutions and approaches may not make them leave the mining businesses since some of the materials from the mining sites remain in demand in the market.

INFORMAL MINING SECTOR

6.1. Overview

Solid mineral mining in Nigeria is still underdeveloped and it lacks large-scale mining. Presently, it is dominated by the informal mining sector, which is composed of artisanal and small-scale miners working with rudimentary methods and limited technical training, social provision, or environmental consideration. Importantly, their sales and distribution channels are mostly unofficial and embedded with smuggling. An exception is quarrying activities where large-scale operations are carried out by construction companies and cement manufacturers. Prominent drivers of the vast dominance of artisanal and small-scale miners in the sector are: (i) long absence of the government from the industry; (ii) absence of large scale miners; and (ii) lack of viable alternative sources of livelihoods.

The Nigerian government pursues an inclusive approach to artisanal mining, whereby artisanal mining activities are only considered to be outside the legal framework, but not illegal. This approach provides the government with an avenue to increase its revenue from artisanal miners while addressing the concerns and needs of these miners and that of their local communities. Along this line, the government has been pursuing in recent times the formalization of artisanal and small-scale miners through cooperatives.

6.2. Regulation

The statutory department that oversees the activities of artisanal and small-scale miners is ASMD. The department was established to provide extension services to both artisanal miners and the local mining communities (see Section 3.2.5).

While most of the artisanal miners operate informally, there are statuary provisions for their operations that can be found in sections 46(1a) and 90(1-3) of the Mineral and Mining Act 2007. Section 46(1a) of the Act legitimizes small-scale mining, while section 90(1-3) specifies that areas covered by such mining activity would not be less than 5 acres and not exceed 3 square

kilometers. It also specifies that artisanal miners shall carryout effective rehabilitation of the mined-out areas and also pay prescribed rehabilitation fees. Additional provisions concerning the activities of artisanal miners can be found in sections 94 and 95 of the Act. Notably, section 94 of the Act States that individuals are not allowed to purchase any mineral unless [s]he holds a license to so, while section 95 States that minerals recovered from small-scale mining should be sold to a licensed Mineral Procurement Centre.

Data garnered from our field visits in the three States suggest that artisanal miners have no fixed buyers; they sell to anybody willing to buy. While some of the artisans argue that market forces determine the price, others argued that the buyers determine the price. In whichever case, the act of selling the solid minerals to anyone who is willing to pay goes contrary to sections 94 and 95 of the Mineral and Mining Act 2007. However, the artisanal miners had no knowledge of any mineral buying centre. A desk review of this information suggests that among the three States, it is only Ebonyi that has a mineral buying center.

6.3. Artisanal and small-scale mining in Ebonyi, Taraba and Ekiti States

Primary data garnered from our field visits to different local communities in Ebonyi, Taraba, and Ekiti States suggest a massive dominance of artisanal and small-scale mining activities in the respective States. In Taraba and Ebonyi State, most of the artisanal miners operate without a mining license, and only a handful agreed to have made an effort to apply for one but had to withdraw due to the long bureaucratic process associated with license application. Others cast doubt on the gains of getting one. However, in Ekiti State, most of the artisanal miners have a mining license or are operating through a cooperative permit following section 49(b) of the Mineral and Mineral Act 2007. Also, artisanal miners in Taraba and Ebonyi State use simple tools (e.g., hammer, shuffle, pans, mortars, small pumps, picks, and axes), as they are unable to afford sophisticated and heavy machines.

Furthermore, data garnered from our field visits to the three States reveal that artisanal miners do not process the minerals before selling them, which makes them earn little from each win. Hence, higher returns lie in the quantity a miner excavates or mine. Regarding organization, most of the artisanal miners in the three States organize themselves in association, especially as

cooperatives. This could be seen as a policy outcome of the government's initiative to formalize artisanal and small-scale miners through cooperatives. However, the government seems to be failing in its part to address the concerns of these miners and that of their local communities. Most of the artisanal miners argued that they only pay taxes and do not get any form of assistance or public good provisioning from the government. Unequivocally, this has exacerbated informal and illicit mining activities in the three States and thereby cause further revenue loss for the government.

6.4. Participation of Women and Children in Solid Mineral Mining in the Focal States

The Mineral and Mining Act 2007 is gender-neutral about the involvement of men and women in the mining sector. It is also neutral about the participation of children in mining activities. However, section 56(1) of the Nigerian Labor Act prohibits women from working underground, while section 59(5a) of the same Act prohibits children under the age of 16 to work underground.

Data garnered from our field visit reveals the participation of both women and children in mining activities. However, their roles and responsibilities within the mining communities vary greatly. In Taraba State, women and children are involved in every kind and stage (e.g., prospecting and exploration, mining, and processing) of mining activities. Most of the children were reported to be school dropouts, while few of them have never been to school. Women, on the other hand, face equal constraints and opportunities compared with the male counterpart. Specifically, women may own mining concessions, serve as mine operators, dealers, or buying agents; or own mining equipment. They also provide goods and services to mining operations in the form of cooking and selling food. In Ebonyi and Ekiti States, however, the mining activities by underage children are limited due to taskforces. In fact, some of the key officials reported that children below the age of 16-18 are not allowed to work in the sites. Regarding the role of women in the communities in Ebonyi and Ekiti States, we find that women can own mining pits to a lesser extent, and this was largely cultural-driven. Furthermore, while women may work underground like their male counterparts, their roles and activities were limited to the processing stage, which includes crushing, grinding, sieving, washing, panning, among others.

6.5. Health and Environmental Impact

One of the significant challenges of mining is its health impact due to constant exposure to chemical substances such as explosives, mercury, and lead. There may also be negative externalities to the health of the local mining communities as these chemical substances are released into the environment. The health impact associated with artisanal mining is even considered worse because they often operate informally, which means they are unregulated, and health and safety measures may not be taken seriously by the miners. In fact, data garnered from our field visits to the three States suggest that a large number of artisanal miners do not use preventive, health, and safety measures while mining. Most of them are also uninformed about the health implications of exposure to these chemical substances. While the communities we visited do not report any case of an outbreak that may be associated with these chemical substances, it is important noting that their health impacts may not be immediate.

In addition to the health impact, mining activities pose a challenge to the environment. For instance, dredging and sluicing during mining cause severe land degradation and river siltation. The statutory department that oversees the (potential) environment-related impacts of mining activities is the Mines Environmental Compliance Department (MECD). The department monitors and enforces compliance with all environmental requirements and obligations as required of mineral title holders (see section 3.2.3). The key environmental regulation guiding mining is found in section 118 of the Mineral and Mining Act 2007, although other mining regulations apply. The Act requires that solid mineral miners manage and mitigate any environmental impact resulting from mining activities. It also specifies that miners would have to rehabilitate and reclaim the land excavated, explored, or mine. Furthermore, section 90(3) of the same Act, requires artisanal and small-scale miners to pay prescribed rehabilitation fee, proportionate to their profits as a way to defray the further cost of rehabilitation and reclamation.

Data garnered from our field visits to the three States reveal that artisanal miners do not obey these regulations. This has led to environmental degradation, erosion, and excessive pollution, amongst other adverse effects.

6.6. Challenges of Tracking Revenue Streams of Informal Mining Sector

From our assessment and observation of the mining activities in the locations visited in the three States, the following would constitute reasons it is difficult to track revenues of the informal sector operators:

a) Smuggling of minerals.

b) Absence of simplified tax and royalty paying system.

c) Difficulties in accessing the mining sites.

d) Lack of public good provisioning, which incentives artisans to evade or avoid taxes.

e) Informal organizations of artisanal miners, which make it difficult for government to appropriately tax the sector.

f) Lack of solid mineral buying centers, which intensifies sales and distribution of minerals through unofficial channels and hence, a loss of revenue by the government.

g) Lack of adequate exploration data, which makes it difficult for the government to track mining activities and potential revenues.

h) Multiple taxation system, which incentives artisans to evade or avoid taxes.

FINDINGS

7.1. Summary of Findings

With regards to the objective of this study, the followings are our finding:

i. Implementation of solid mineral industry policies related to mining activities and revenue beneficiation

a) There are substantial gaps in implementation of policies related to mining activities in the three States, particularly in area of revenue collection

b) Our study findings show a wide range of fees miners are required to pay at different levels: statutory fees, discretionary fees from State and local governments, as well as local communities

c) Lack of clear guidelines on fees encourage underreporting and smuggling in the States

d) Regulations around mineral sales is largely not being followed, as miners tend to sale minerals outside of the official minerals market intuitional framework

ii. Effectiveness and quality of Community Development Agreements

a) Our survey shows that many mining communities in Taraba State do not have CDAs.

b) In many mining communities in Ebonyi and Ekiti States where CDAs exist community leaders express dissatisfaction with the extent of implementation of those CDAs.

c) Many communities feel largely powerless in confronting mining investors in cases where commitments to project implementation have been weak

d) Although the knowledge of CDAs is limited and very little had been done in that regard, but a participant informed that he had benefitted from a scholarship from a mining investor based on their commitments to his community especially in Taraba State.

- The Ministry of Solid Minerals has a CDA template which communities can access and use in negotiating their CDAs with mining investors in Ebonyi State. In Ekiti State, the

Federal Mines Office suggested it has this template and is willing to assist communities in that regard. Communities could get help from the Ministry of Solid Minerals when their CDAs are not complied with (information from the ministry).

iii. Evaluate environmental policies adherence and challenges

a) Regulatory agencies across the three survey States accuse artisanal miners of being the most environmentally unfriendly mining operators

b) Investors especially in Ebonyi State try to avoid Environmental Impact Assessment (EIA) and prefer to do three yearly environmental impact audit. But there is a problem which arises from lack of baseline data which the EIA is supposed to provide. Overall, the cost of EIA scares investors from embarking on it.

c) Evidence of regulatory failures on the enforcement of environmental policies abound in many mining communities where the survey took place

d) Operators as well as regulators are aware of the myriad of environmental challenges in mining communities but little has been done to redress those challenges.

e) Ekiti state happens to be the only one out of the three states that has a functioning MIREMCO, though it is not chaired by A representative of the Mines Environmental Compliance Department as required by the regulation. In any case, those who were represented at the meeting advised that it was out of convenience that they made this arrangement and that they are working harmoniously.

iv. Evaluation of fiscal regimes in the sector- national and subnational

a) Our study reveals that both civil servants in government agencies and solid minerals industry operators in the States perceive the statutory fiscal regime to be adequate. The main concerns arise from non-statutory fees.

b) Some community leaders have the impression that their communities ought to get more benefit from mining in terms of statutory revenue allocation.

c) We observe reasonable correspondence between statutory allocation based on the 13% mineral derivation rule and the amount of mineral produced in the States. We note however, that although Ekiti State is reported to have produced more solid minerals than Taraba in the NEITI 2016 report, it received lower 13% solid mineral derivation allocation.

v. Revenue leakages challenges, State governments' benefits and projections for national economy diversification.

a) Smuggling of minerals.

b) Difficulties in accessing the mining sites.

c) Informal organizations of artisanal miners, which make it difficult for government to appropriately tax the sector.

d) Lack of solid mineral buying centers, which intensifies sales and distribution of minerals through unofficial channels and hence, a loss of revenue by the government.

e) Lack of adequate exploration data, which makes it difficult for the government to track mining activities.

vi. Artisanal mining coverage in target States, participation of women and children in mining, and challenges with the tracking of revenue streams of the informal mining sector.

a) Our survey reveals a massive dominance of artisanal and small-scale miners in the different local communities in Ebonyi, Taraba, and Ekiti State.

b) In Taraba and Ebonyi State, most of the artisanal miners operate without a mining license. On the other hand, in Ekiti State, most of the artisanal miners either have mining licenses or operating through a cooperative permit.

c) The miners do not process the minerals before selling them, and they sell to anyone willing to buy.

d) Women and children are involved in mining activities across the three States, their roles and responsibilities within the mining communities vary greatly. In Taraba State, women and children are involved in every kind and stage of mining activities. However, in Ebonyi and Ekiti States, mining activities by underage children are limited, while the

roles of women are limited to the processing stage, which includes crushing, grinding, sieving, washing, panning, among others.

e) Artisanal miners do not obey the environmental regulations. This has led to environmental degradation, erosion, and excessive pollution, amongst other adverse effects.

f) Challenges with tracking of revenue streams of the informal mining sector include, government difficulties in accessing the mining sites, lack of solid mineral buying centers, and exploration data, informal organizations of artisanal miners and smuggling.

g) In Taraba State, it was observed that there is no minerals buying centre and the distance between the State and its assigned mineral buying centre is much. This supports the non-selective sale of their minerals.

POLICY RECOMMENDATIONS FOR EBONYI, EKITI AND TARABA STATES

Based on our findings in the three focal States, Ebonyi, Ekiti and Taraba, we propose the following recommendations which we believe can turn the fortunes of the solid minerals mining sector if followed judiciously:

8.1. Legal Recommendations

a. Amend the NMMA 2007 to define a clear approach for managing grievances that may arise through the implementation process of the CDAs. In the survey, we observe that many communities feel helpless with poor levels of commitment from mining operators. Even when certain projects are contained in the CDA, community leaders are unable to compel investors to commit to actual project implementation, or ask for an amendment of earlier agreed projects, because the CDA did not envisage such an infraction even before the stipulated five-year period for the review of the CDA.

b. Amend the NMMA 2007 to indicate appropriate sanctions that should be imposed on mining firms in the event they fail to fulfil their obligations as contained in the CDA. We find that communities do not seem to know what to do in the event that an investor fails to implement the terms in the CDA. There is need to define clear sanctions in the Act to serve as a means for regulating the behaviour of investors.

c. Amend the NMMA 2007 to include a mechanism for ensuring inclusive and participatory process in developing the agreement such that various groups in the community feel adequately represented. The challenge here has been that of how well persons representing communities in the CDA committee reflect the diversity of stakeholders and interests within the communities.

d. Amend the NMMA 2007 to provide appropriate protection of women and children. The practice of mainly artisanal and small-scale miners have been a near total disdain for labour market rules. Regulators severally report the poor industry practice of artisanal miners across the States. The Act is generally vague on its expectation from mining operators regarding the health and safety of particularly vulnerable children. The survey reports

instances of children drinking from mining pits contaminated with lead, and children inhaling various harmful substances while at work.

8.2. Investor Recommendation

a. Reduce mistrust of industry practitioners towards the State supervisory agencies. Our surveys reveal that solid minerals industry practitioners do not trust government supervisory institutions in the States. Mistrust arises from incessant fees from State and local governments as well as local communities, which encourage underreporting of mining activities. As a result, the State governments are unable to recover internally generated revenues from solid minerals mining that measure up with the level of mining activities in the States. Under-reporting and smuggling also reduce the amount the allocation the States can get from the federal government based on the 13% derivation principle. Streamline mining fees in the States will improve confidence in supervisory institutions. Also, using returns form mining fees to improve the operational environment for mining can encourage adherence to regulatory guidelines, which will enable industry development.

b. Develop Public-Private Partnerships in Solid Mineral Mining. Mining finance is a huge constraint to solid mineral industry development in the States, which is not surprising because mining is a highly risky venture. However, partnerships between State-sponsored companies and the private sector in the form of joint venture arrangements can improve the risk perception of mining firms, making mining finance more accessible. The partnerships could also take other forms, such as equipment leases that reduce the technological constraints faced by miners in the States, particularly the small and medium-scale miners. While Ekiti and Taraba already have some of these arrangements in place, our survey reveals that the activities are not deep enough, as many industry practitioners are either unaware of them or are not able to benefit from them.

c. Improve Documentation and Data. Inadequate geoscience data makes it difficult for potential investors to reliably assess the quantity and quality of mineral deposits in the States. This plays into the difficulty in obtaining mining finance, as data limitation

constrains the ability of investors to forecast potential returns from mining with an acceptable level of uncertainty. Our surveys reveal that inadequate geoscience data arise from poor funding, lack of equipment, and manpower skill in the relevant government ministries. Inadequate documentation of ongoing mining activities makes it impossible for the State governments to ascertain the actual depth of the solid minerals industry in the States. As a result, the true contribution of the industry to States' GDP is not known, and the States lose internally generated revenue and some portion of the federal allocation it should receive based on the principle of derivation that governs the allocation of solid mineral revenue in Nigeria.

8.3. Artisanal and small-scale miners

a. Formalize artisanal and small scale miners through cooperative unions. Artisanal and small scale mining is found to be rampant in Ebonyi, Ekiti and Taraba States. Numerous problems are associated with this form of mining, ranging from poor health conditions to a low level of compliance with environmental guidelines. As a result, there are many uncovered pits in the States, contributing to erosion and other environmental ills. The State governments can play a huge role in solving these issues by taking leadership in the formalization of artisanal and small-scale mining. This can be achieved by promoting simpler regulations free of unnecessary bureaucracy, which will encourage the registration of operators and reduce illegal mining. Such formalization would also empower the miners in the States and position them to be able to take advantage of the fiscal incentives made available to solid mineral miners by the federal government. The net effect would be more diversified State GDP and revenue sources that will allow mining activities to benefit the common man that suffers the environmental and ecological ills that arise from mining.

b. Government should provide micro credit fund for artisanal miners. Our survey in the three focal States suggests that artisanal and small-scale miners find it difficult to access credit from formal financial institutions. Hence, these miners with large dominance in the sector use simple tools and are unable to process the minerals before selling them off. To increase the value each miner can make from each win and also increase value to local economy,

there is need for credit access to enable these miners' transition from simple tools to more technical and heavy machines.

c. Government should provide extension services. Our survey reveals that government have done less for these artisanal miners in terms of technical assistance and support services. To increase value from the sector, there is an urgent need for the government to provide technical assistance to these artisanal miners. Environmental monitoring plans should be contained in the CDAs.

8.4. Institutional Recommendations

a. There is a need for community capacity building to strengthen the ability of mining communities to relate with mining investors and manage stakeholders and interest within the community in a manner that enables them to produce desired results or outcomes from the CDAs. NGOs are undertaking much of these capacity-building activities, but information from the field shows much disparity in capacities across mining communities.

8.5. Revenue Leakages

a. Tax more, provide more: Our survey reveals that while artisanal and small-scale miners pay taxes, they receive little or no services from the government. The principle of fiscal exchange is that as the government takes, it also gives. Unequivocally, the inability of the government to give back to these artisanal miners and the local mining communities has led to tax evasion. Hence, the government should do more in terms of public good provisioning for the local mining communities. The government should also provide more extension services to the miners in terms of technical training and health and environmental degradation awareness.

b. Establishment of a one-stop-shop: Our survey reveals the lack of awareness about mineral buying centers among artisanal miners. They sell to anyone, and often, the buyer determines the price. This leads to a revenue loss to the government and reinforces smuggling and unofficial sales channels of solid minerals. Most of the artisanal miners also operate informally due to bureaucratic processes associated with securing a license. To curb these

challenges, among others, the government should establish a one-stop-shop in the different States with possible substations in the mining-intensive local governments. The one-stop-shop that would at as license buying centers and also be a meeting point between miners and mineral buyers.

8.6. Environmental

a. Improve enforcement capacity of enforcement agencies at the State and federal levels. Reports from the survey show that many of the regulatory agencies feel overwhelmed by the magnitude of environmental problems posed by mining activities in affected communities.

REFERENCES

Loutit, J., Mandelbaum, J., & Szoke-Burke, S. (2016). Emerging practices in community development agreements. Journal of Sustainable Development Law and Policy (The), 7(1), 64-96.

MMSD (2002). Breaking New Ground. London: Mining, Minerals and Sustainable Development Project/IIED. Available at: https://pubs.iied.org/pdfs/9084IIED.pdf (accessed 14 February 2020). Nigeria, 2007.

Nigerian Minerals and Mining Act 2007. http://www.eisourcebook.org/cms/Nigeria%20Minerals%20%26%20Mining%20Act%202007.pdf. (accessed 14 February 2020).

Otto, J. M. (2018). How do we legislate for improved community development? Extractive industries: the management of resources as a driver of sustainable development. Oxford University Press, Oxford, 673-694. Available at: https://www.wider.unu.edu/sites/default/files/wp2017-102.pdf (accessed on 14 February 2020).

World Bank. (2012). Mining Community Development Agreements Source Book.

NEITI (2017) Solid Minerals Industry Audit Report 2015. https://eiti.org/files/documents/neiti-sma-report-2015-full-011117_002.pdf

NEITI (2018) Solid Minerals Industry Audit Report 2016. https://neiti.gov.ng/index.php/neiti-audits/solid-minerals/category/182-2016-solid-minerals-audit-report

NEITI (2019) Solid Minerals Industry Audit Report 2017. https://www.neiti.gov.ng/index.php/neiti-audits/solid-minerals/category/193-sma-2017-report

About Centre LSD

AFRICAN CENTRE FOR LEADERSHIP, STRATEGY AND DEVELOPMENT (CENTRE LSD)

…Building Strategy Leadership for Sustainable Development in Africa.

The African Centre for Leadership, Strategy and Development (Centre LSD) is a non – profit, non – governmental organization established under Nigerian laws to build strategic leadership for sustainable development in Africa.

The African continent is very rich and diverse. There are abundant human and natural resources in the continent. But the continent has the worst development indices in the world: maternal mortality, infant mortality, literacy rate, HIV/AIDS prevalence, poverty rate, life expectancy etc. More than half of the populations of African people are living in abject poverty. Most country in Sub-Sahara Africa are unlikely to achieve the modest Millennium Development Goals (MDGs) adopted by world leaders at the UN Millennium Declaration in 2000. Many African countries continue to suffer food shortages. Some countries are in conflict. We have experienced democratic reversals in some countries with the military coming into power in Guinea Bissau. All of these make the development of Africa a huge challenge. The continents to grapple with the developmental challenges have been complicated by its colonial history, globalization, leadership failures and adoption of development approaches that have been proved to be inadequate.

The importance of leadership for the success of organizations and nations cannot be overemphasized. Some scholars have pointed out that everything rises and falls on leadership. Despite this recognition, there is scarcity of leaders all over the world. There is a saying that the world is filled with followers, supervisors and managers but very few leaders. There are four kinds of people in the world: those who watch things happen; those who let things happen; those who ask what happen and those who make things happen. Leaders are those who make things happen. A visionless, insecure and incompetent leadership is a killer of organization and nations.

Similarly, strategy is very crucial to the development and performance of any organization or nation. Strategy occupies a central position in the focus and proper functioning of any organization or nation. This is because it is a plan that integrates an organization or nation's major goals, policies and actions into a cohesive whole. A well formulated strategy should therefore help to marshal and allocate an organization or nation's resources into a unique and viable posture based on its relative internal competencies and shortcomings, anticipated changes in the environment, and contingent moves by others. Strategies help to create a sense of politics, purpose and priorities.

A dynamic and visionary leadership combines with appropriate strategy process will produce a correct development approach that will lead to the prosperity and development of Africa. Centre LSD is poised to contributing to the transformation of Africa through building dynamic and visionary leadership and proposing appropriate strategies and development approaches.

The major focus of work will be in the giant of Africa Nigeria but the centre will work across Africa with a Pan-African perspective with partners in all the sub-regions in Africa. The Centre's strategy, programme and actions will focus on Africa with the operations being run from Nigeria partnering with organizations across Africa. Centre LSD is registered with Corporate Affairs Commission as an NGO in Nigeria.

CENTRE LSD'S VISION

The vision of Centre LSD is an African society with strategic leadership and sustainable development.

CENTRE'S LSD MISSION

The Centre's mission is to work with forces of positive change to empower citizens to transform society.

Centre LSD's Values

The Centre is guided by the following values:

Diversity
Integrity
Feminism
Dignity of the human person
Pan-Africanism
Accountability
Transparency
Transformative change

The objectives of the centre include:

1. To promote ideas, policies and actions that will lead to transformative change in Africa.
2. To promote leader development (expanding the capacity of individuals for effective leadership roles and processes) and leadership development (expansion of organizations' capacity to enact basic leadership tasks including setting direction, creating alignment and maintaining commitment).
3. To develop the capacity for strategic thinking, formulation, implantation and evaluation.
4. To promote human centre and sustainable development with special focus on Governance, Human Centre Development and Environment.
5. To collaborate with individuals, organizations, networks, coalitions and movements that will help in achieving the Centre's objectives

OPERATIONALAPPROACH

The centre carries out its programmes through the following methods:

Research
Think Thank

Capacity Building
Advocacy and Campaign

PROGRAMMATIC APPROACH

The Centre's programme is built on the principles of catalytic partnership and rights based approach. The programme conception, design, implementation and evaluation are built around four principles:

1. Dynamic and visionary leadership
2. Appropriate strategy
3. Relevant development approaches including the promotion of women's right, citizen participation, ownership, pro-poor orientation and focus on the next generation of youth and children.
4. Building people and institutions.

ORGANS OF CENTRE LSD

International Advisory Council
Pharm. Joel Omonigho, United Kingdom
Dr. Omano Edigheji, South Africa
Dr. John Ojediran, Nigeria
Mr. John Samuel, India
Mr. Brian Kagoro, Zimbabwe

Board of Trustees

I. Mr. Ernest Kemakalom
ii. Mrs. Kyauta Giwa
iii. Dr. (Mrs.) Ufouma Awhefeada
iv. Ms. Huawa Mustapha
v. Ms. Pamela Esiri
vi. Dr. Otive Igbuzor
vii. Mr. Monday Osasah
viii. Ms. Comfort Obi (OON)

Founding Executive Director

Dr. Otive Igbuzor

Headquarters:

Suites 27, Tolse Plaza,
4, Franca Afegbua Crescent ,
Formerly Lawan Gwadabe Crescent,
Off Samuel Jereton Mariere Road,
After Apo Legislative Quarters,
Apo, P. O. Box 9661, Garki, Abuja Nigeria.
Website: www.centrelsd.org
E-mail: info@centrelsd.org
Tel: +23498703178

Niger Delta Office:
Odeyovwi Villa
Emonu Orogun, Ughelli, Delta State.

Northern Regional Office:
Kebbi Office: No 4, Off Muhammed Adamu Aliero Road,
Behind Bahamas Food Restaurant,
Birnin Kebbi, Kebbi State.

Yola Office: Suite 220-221 Police Shop Wasiri Street,
Opposite Murtala Mahammad College,
Jimeta, Yola-Adamawa State.

Website: www.centrelsd.org
Email: info@centrelsd.org
Facebook: @centrelsd
Twitter: @centrelsd
Tel: +234(0)8122556434

Published with support from OSIWA

ISBN: