NIGERIA NATIONAL ASGM STATUS REPORT

EXECUTIVE SUMMARY

The report was driven by the desire to examine the status of ASGM in Nigeria. This was based on a recognition of the fact that the government has carried out several activities and programmes aimed at promoting a cleaner and sustainable ASGM process.

The Government has revised some legislations and made new regulations including undertaking some efforts to strengthen the framework for better implementation of new initiatives all in the attempt to ensure that ASGM in the country is carried out in a way that promote better environmental stewardship and livelihood sustainability for the people. With a combined estimated total of 259,012 direct work force and about 1,291,840 indirect workers engaged in the ASGM sector, as indicated in the National Action Plan (NAP)[i], this demonstrates that with effective regulation, the sector holds great promise for livelihood consolidation.

Though not specifically for ASGM, the revised Nigeria Minerals and Mining Act 2007 and the Minerals and Mining Regulations 2011 have key provisions that impact on the ASGM activities in the country.

Whilst the Act recognizes that the Federal Government of Nigeria own all mineral resources within the territorial space of Nigeria, the Act confers the right to explore and/or mine mineral deposits or trade minerals on individual, corporate body or a mining cooperative that has been awarded relevant permits by the Ministry of Solid Minerals Development (MSMD) to do so.

In addition, the Act establishes the legality of ASM as it guarantees the right to participate legitimately in the Nigeria mining sector by ASM operators. These are derived from sections 47, 48, 49, 51 and 52, which variously provide that artisanal miners could be granted appropriate permits to operate lawfully as registered, licensed and performing mining cooperatives.

Remarkably, the Act in Section 34 establishes the Solid Minerals Development Fund (SMDF). The fund is specifically mandated by section 34, subsection 2 (d & e) to finance the provision of extension services to registered and performing ASM operators.

As a supplement to the 2007 Minerals and Mining Act, the Nigeria Minerals and Mining Regulation 2011 was adopted to establish a coordinated and regulated mining sector. Key features of the regulations, as they relate to ASGM sector, concern ASM formalization in sections 230 to 232, where guidelines are provided for registration of artisanal mining cooperatives, qualification for access to extension services and registration of Mineral Buying Centres.

At the international level, the Federal Government of Nigeria (FGN) had demonstrated its commitments to addressing the challenge of mercury pollution by signing the Minamata Convention on the 10 October 2013 and ratified the Convention on the 1st February 2018[ii] . The FGN had also developed and launched the National Action Plan for the Reduction of the Use of Mercury in ASGM on 11th May 2021[iii].

In 2019, the Federal Government launched the Presidential Artisanal Gold Mining Initiative (PAGMI), a wide-ranging artisanal and small-scale gold mining development programme put together by the government for the purpose of fostering the formalization and integration of artisanal gold mining activities into Nigeria's legal, economic, and institutional framework. It was hoped that the PAGMI will integrate social, environmental, health and safety, economic, commercial, and technical considerations, into its implementation.

Despite all these efforts of government and the initiatives that is being driven, mercury trade is going on unabated. In 2021, mercury exports by country showed that Nigeria was amongst the top four exporters of Mercury with a total of 1,086,970kg[iv] exported to UAE, India, Malysia, China and Belgium. The same year 2021, Nigeria also imported 16,000kg[v] of mercury from Ethiopia. Similarly, it was also discovered that in 2021, Nigeria ASGM sector used about 16,027kg[vi] for gold production.

The status of ASGM free mercury remains doubtful. From Osun to Niger, from Zamfara to Kaduna, from Nasarawa to Abuja, from Kebbi to Kwara, the ASGM continue to be expanding but remain signposted by the disturbing involvement of the increase in the use of mercury across almost all the ASGM locations. This goes to confirm that there is an ongoing insidious and illicit

movement and trade in mercury in the country and across borders. Whilst findings indicated that some illicit supplies feeding into the larger domestic supply chain in Nigeria come from other sectors such as cosmetics[vii], health and power, informal and illegal movement of mercury from across neighboring West African countries into Nigeria has also been noted particularly from Benin, Ghana, Niger Republic, Mali and Burkina Faso[viii]. With the very weak Nigeria border protection system and a compromised Customs Service, this illegal movement of mercury is not necessarily difficult.

This is not only frustrating but also imperiling the lives of future generations as our flora and fauna bow to the crushing weight of the negative impacts of mercury[ix].

It is for this reason that AIFES including other concerned stakeholders has proposed that the Federal Government of Nigeria (FGN) pass/update existing laws and regulations to include mercury specific provisions for regulating mercury flow and its ban, embark on massive education and awareness campaigns in collaboration with state governments on the dangers of Mercury and also invest heavily on capacity enhancement of the local people particularly around mine communities on alternative and new technologies for gold extraction.

The Federal Government is further encouraged to take a decisive action against Mercury pollution by joining the call for ending the global Mercury trade and the phasing out of Mercury use from AGSM in 2032. These actions, it is believed will make a turn around in our quest for a mercury free-ASGM.

INTRODUCTION

Gold mining has been part of the Nigeria population for more than a hundred years and is widespread[x]. In Nigeria, gold deposits have been found in some of the states[xi] in the country namely Zamfara, Niger, Kaduna, Osun, Nasarawa, Kano and Kebbi.

A highly treasured metal sought for its physical and chemical properties occurs naturally in the earth's crust often found in alluvial and eluvial deposits[xii].

Like every other prized metal located in the crust of the earth, the extraction of gold requires a rigorous process of altering the integrity of the Earth through different methods including excavation.

Over the years, miners particularly those engaged in Artisanal Small-Scale Gold Mining (ASGM) have used different processes including the use of mercury and other chemicals to facilitate the extraction of gold.

However, this approach is not without its challenge. Gold mining has been associated with significant environmental degradation, including water contamination and land degradation. The use of mercury[xiii] in artisanal gold mining exacerbates pollution, impacting water quality and posing severe health risks to local communities through mercury pollution which had led to high concentrations of mercury being found in mine sites and water bodies such as was detected in the Manyera River in Niger State where sediment collected downstream had mercury contamination of 0.021mg/L exceeding World Health Organization (WHO) limits of 0.001ppm standard limit for environmental matrices.[xiv]

The highly toxic nature of mercury and its associated compounds have been found to disrupt aquatic ecosystems, leading to the destruction of habitats and loss of biodiversity. It is in recognition of the above, the Nigeria Government had joined the global community in adopting the Minamata Convention on Mercury[xv] to regulate the use of mercury and its possible elimination to protect our global environment and human health from damage. This Convention amongst others deals with the issue of mercury in Artisanal Small-Scale Gold Mining (ASGM).

NATIONAL REGULATORY FRAMEWORK RELATED TO MERCURY AND ASGM

The national regulatory framework governing mercury and ASGM in Nigeria is mediated by three primary objectives namely:

I. To establish a framework for proper management of mineral resources and promotion of sustainable mining practices.
II. Ensuring the protection of the Environment.
III. Protect Human Health.

(I) Establishment of a framework for proper management of mineral resources and promotion of sustainable mining practices

The overarching law for regulating Minerals and Mining in Nigeria, is the 2007 Minerals and Mining Act[xvi] with the 2011 Minerals and Mining Regulation. This law is primarily implemented by the Federal Ministry of Solid Minerals Development (MSMD).

Though the Act and the Regulation provide the legal framework for solid mineral exploitation in Nigeria, these laws do not prohibit mercury export or import into the country.

By the provisions of Section 6 of the Minerals and Mining Act, 2007, only persons with licenses or leases granted by the Minister shall prospect or conduct Mining operations.

The Minister therefore is the overseer of the laws that govern the exploration and exploitation of solid minerals in Nigeria.

The Act empowers the Minister of the Federal Ministry of Solid Minerals Development (MSMD) to issue six types of permits[xvii], licenses, and leases, as described below. Permits generally convey non-exclusive use rights, while licenses provide exclusive rights for a limited purpose and leases provide exclusive ownership rights for a broader purpose.

(1) Reconnaissance permits - right to access land to search for mineral resources on a non-exclusive basis.
(2) Exploration licenses - right to explore mineral resources on an exclusive basis, including right to erect machinery and plants, along with the right to conduct bulk sampling and sell samples.

(3) Mining leases - right to exclusively use, occupy, and carry out mineral exploitation in the area covered by the lease, not to exceed 50 km[1].

(4) Small-scale mining leases - right to exploit minerals in area between 5 acres and 3 square km using low level technology or application of methods not requiring substantial expenditure.

(5) Water use permits - right to use water for exploration, mining, or quarrying.

(6) Quarry leases - right to remove and dispose of any quarriable minerals, including necessary excavation and construction, in area not exceeding 5 square km.

SMALL-SCALE MINING

It is interesting to note that the Act recognizes the importance of small-scale mining and provides for the issuance of licenses and permits for small-scale mining operations.

THE MINERALS AND MINING REGULATIONS 2011

In May 2011, the Minerals and Mining Regulations under the Minerals and Mining 2007 Act was adopted. In this regulation, there is a section devoted to - Artisanal and Small-Scale Mining Operation, which allows miners to register as artisanal and small-scale mining cooperatives and obtain extension services from the Ministry, including assistance in securing financial support from the Solid Minerals Development Fund. As noted above, artisanal mining cooperatives are also eligible to apply for mineral titles in the form of a small-scale mining lease. *The regulation does not ban the import and export of mercury though Section 48 disapproves ASM operators from extensive use of toxic chemicals.*

THE METALS AND MINERALS POLICY 2008

The Metals and Mineral Policy[xviii] aimed to facilitate the orderly development of Nigeria's mineral resources, ensuring safe, economic, and environmentally sound exploitation. The policy was put in place to ensure the efficient and effective utilization of Nigeria's mineral resources, particularly in light of the resurgence of mineral commodity prices and increased global exploration activities.

(II) Ensuring the Protection of the Environment

Some laws and regulations that are essential for the protection of the environment in addressing the environmental impacts of mercury pollution and ASGM have also been put in place in Nigeria.

Whilst the 2007 Minerals and Mining Act deals with some aspect of environmental protection, other laws and regulations primarily implemented by the ***Federal Ministry of Environment*** are geared towards ensuring the protection of the Environment.

The Federal Ministry of Environment is a policy formulation and enforcement Ministry as well the Designated National Authority (DNA) for the Minamata Convention on Mercury and other Multilateral Environmental Agreements (MEAs).

The Minister of Environment is also the supervisory authority in a number of domestic legislations relating to the protection of the environment and by extension preventing mercury pollution in ASGM.

Some of the laws and regulations overseen by the Federal Ministry of Environment include:

A. The National Environmental Standards and Regulations Enforcement Agency (Est.) Act 2007 ("NESREA Act") - which gives the Agency powers to prescribe effluent limitations and prohibits the discharge of hazardous substances, unless such discharge is permitted under any Nigerian law. The National Environmental Standards and Regulations Enforcement Agency (NESREA) Act 2007 which created the general enforcement agency for the environment sector except for Oil and Gas. The NESREA Act does not have specific provisions for mercury discharge in waterways.

B. The Environmental Impact Assessment Act, 1992 (as amended by EIA Act CAP E12 LFN 2004) - makes it mandatory to conduct an environmental impact assessment in respect of any proposed project or activity that is likely to significantly affect the environment.

C. Harmful Waste (Special Criminal Provisions) Act Cap H1 LFN 2004 is an Act which criminalizes the illegal disposal of harmful wastes. Though there is no specific mention of mercury as a harmful waste it falls within the category of wastes regarded as harmful wastes as interpreted in this Act. In this Act, “harmful waste" means any injurious,

poisonous, toxic or noxious substance and in particular, includes nuclear waste emitting any radioactive substance if the waste is in such quantity, whether with any other consignment of the same or of different substance, as to subject any person to the risk of death, fatal injury or incurable Impairment of physical and mental health; and the fact that the harmful waste is placed in a container shall not by itself be taken to exclude any risk which might be expected to arise from the harmful waste. The ancillary regulation, the National Environmental (HealthCare Waste Control) Regulation 2021 specifically listed mercury-containing products as part of the healthcare wastes. ***The Minister for the Federal Ministry of Environment is also specifically named as a supervisory authority of the Harmful Waste (Special Criminal Provision) Act.***

(III). Protect Human Health

The Federal Ministry of Health and Social Welfare (FMHSW)

The Federal Ministry of Health and Social Welfare is the coordinating Ministry of the Federal Government on issues of health. It is responsible for addressing the health concerns arising out of the negative impacts of mercury pollution and ASGM. The Ministry is responsible to assess the short- and long-term health impact of chemicals and provide expertise for treatment of people exposed to chemicals. The Ministry formulates, disseminates, promotes, implements, monitors and evaluates health policies of the Federal Government of Nigeria, using the National Health Act, and collaborates with the National Council on Health (NCH), States and Local Governments, the Private Sector and Civil Society Organizations in formulating health policies.

<u>Other Legislations and Regulations That Have Impacts on ASGM and Mercury Use</u>

D. The National Agency for Food and Drug Administration and Control (NAFDAC), Decree 15 of 1993 (amended by Decree 19 of 1999 and now Act Cap N1 Laws of the Federation of Nigeria (LFN) 2004.
E. The Factories Act 1990 Cap 126 Vol. III, Laws of the Federation of Nigeria being implemented by Inspectorate Division of the Federal Ministry of Labour.
F. The Consumer Protection Council (CPC) Act 1992 Cap C25 of 2004.

G. The Standards Organization of Nigeria (SON) Act No. 56 of 1971. This is an Act to establish the Standards Organization of Nigeria to standardize methods and products in Nigerian industries and to provide for other matters connected thereto. The Standards Organization of Nigeria have the duty to ensure that products in the convention are not imported into Nigeria.
H. Nigerian Upstream Petroleum Regulatory Commission. This commission regulates the petroleum sector (both upstream and downstream). This includes regulation of hazardous materials, consignors, consignees of drilling chemicals, exploration, formulation, refineries, distribution, import and export of petroleum products.

NATIONAL EFFORTS TO ADDRESS MERCURY AND IMPLEMENT THE MINAMATA CONVENTION

The Federal Government of Nigeria has made some efforts to ensure the reduction, and where possible, elimination, of mercury use in industrial applications, processes and products. Some of these actions are highlighted below:

In 2007, Nigeria joined the UNEP Global Mercury Partnership in four thematic areas viz:

i. Artisanal and Small-scale Gold Mining (ASGM),
ii. Mercury releases from coal combustion,
iii. Mercury in products, and
iv. Mercury releases from the cement industry.

To ensure an integrated national approach and programme for the sound management of chemicals including mercury, a multi-stakeholders National Committee on Chemicals Management (NCCM) was established in 2012, with the overall objective to promote and coordinate a coherent, coordinated continuous and cost-efficient approach to the management of chemicals across all sectors necessary to protect the environment, human and animal health in Nigeria.

Following this development, a National Mercury Inventory was undertaken using the UNEP's Toolkit (level 1) for identification and quantification of mercury releases in 2012. The inventory provided a critical national baseline data on individual mercury release sub-categories.

- A National Minamata Initial Assessment (MIA), aimed to strengthen national decision-making toward ratification of the Minamata Convention on Mercury and build national capacity towards its implementation, was carried out between 2015 and July 2017, with technical and financial support from UNIDO and GEF.
- The Federal Government ratified the Minamata Convention on Mercury on the 1st February 2018.
- The development of a National Action Plan for the reduction and eventual elimination of mercury use in Artisanal and Small-scale Gold Mining (ASGM) in Nigeria was completed in 2021.
- Development of a draft National Policy on Mercury Management in Nigeria. Nevertheless, the draft policy is not yet approved.
- Implementation of a project titled "Capacity strengthening for implementation of the Minamata Convention on Mercury in Nigeria "between 2021 to 2023, the project produced the following deliverables:
    - National Action Plan for Mercury Reduction in Cement Sector,
    - National Action Plan for Management of Mercury Supply Sources and Trade,
    - National Action Plan for Environmental and Health Monitoring,
    - National Action Plan for Environmentally Sound Management of Waste,
    - National Action Plan on Mercury Added Products,
    - National Implementation Strategy.

As part of the continuing efforts to promote the implementation of the Minamata Convention, the Federal Ministry of Environment has established a collaboration with UNIDO, Ministry of Solid Minerals Development (MSMD) and the Basel Convention Regional Centre for Africa (BCRCCA) to implement the GEF funded project titled *GEF GOLD+ in Nigeria: Enhancing the Formalization and Mercury Free Technologies in Artisanal and Small-Scale Gold Mining (ASGM) in Nigeria*.

It is understood that the Objective of the project amongst others is:

To reduce the use of mercury in the ASGM sector in the participating states (Niger, Kaduna, Zamfara and Kebbi states) and eventually the country at large, through a holistic, multi-

sectoral integrated formalization approach, and increasing access to finance leading to adoption of sustainable mercury-free technologies and access to traceable gold supply chain.

The Federal Ministry of Environment will lead the execution of this project in close collaboration with relevant stakeholders. Available data had shown[xix] that miners in Niger State cumulatively used 2,797kg annually, Kaduna 3,257kg annually, Zamfara 8,782kg annually and Kebbi 581.07kg for gold mining. This will provide the baseline against which any reduction or otherwise will be measured as the project is implemented. ***The project has suffered some delay but it is expected to take off in June 2025.***

PRESIDENTIAL ARTISANAL GOLD MINING INITIATIVE (PAGMI)

According to the Federal Government statement during the launch of the initiative in 2019, The Presidential Artisanal Gold Mining Development Initiative (PAGMI[xx]) is a comprehensive artisanal and small-scale gold mining development programme, launched to foster the formalization and integration of artisanal gold mining activities into Nigeria's legal, economic, and institutional framework.

It anticipated that PAGMI will integrate social, environmental, health and safety, economic, commercial, and technical considerations, into its implementation.

It was designed as a broader strategy to address the structural and institutional factors such as rural poverty, lack of alternative livelihoods, and difficulties in meeting legal and regulatory requirements that tend to push artisanal gold mining operators deeper into the informal economy.

It was also hoped that the PAGMI process will be the catalytic platform for the integration of the provision of access to markets for the artisanal miners through a National Gold Purchase Program and the deployment of enhanced mining methods at artisanal and small-scale mining sites.

In related development, providing better access to markets through the National Gold Purchase Programme is only the first step in a comprehensive artisanal and small-scale gold mining development strategy integrating social, environmental, health and safety, economic, commercial, and technical considerations.

Kebbi and Osun States were designated as the Pilot States for PAGMI whilst intervention in Kaduna, Zamfara and Niger States were to commence immediately after the Pilot.

It was also projected that PAGMI will deploy safer and more efficient mining and processing technologies across artisanal mining locations across the country.

Using a Centralized Offtake and Supply System supported by a Decentralized Aggregation and Production Network, PAGMI will buy all the gold produced by artisanal and small-scale miners and aggregated by licensed buying centers and aggregators for supply to the Central Bank of Nigeria.

According to the Presidency, PAGMI will also be setting up gold aggregation centers in addition to supporting licensed buying centers and aggregators with access to financing options, responsible sourcing mechanisms, management and technical expertise including improved testing and processing equipment.

It is now six years since the initiative was launched yet we have not seen any positive development arising from the programme especially as it relates to reduction in Mercury use in ASGM and the provision of alternative technologies for the production of environmentally friendly gold as was promised under the PAGMI.

ACTIVITIES AROUND ARTISANAL SMALL SCALE GOLD MINING IN NIGERIA

The Artisanal and Small-scale Gold Mining (ASGM) industry is very prevalent in Nigeria and despite all the efforts of the Federal Government to limit the use of mercury, its use in ASGM is still widespread in the extractive process thereby increasing the level of mercury contamination.

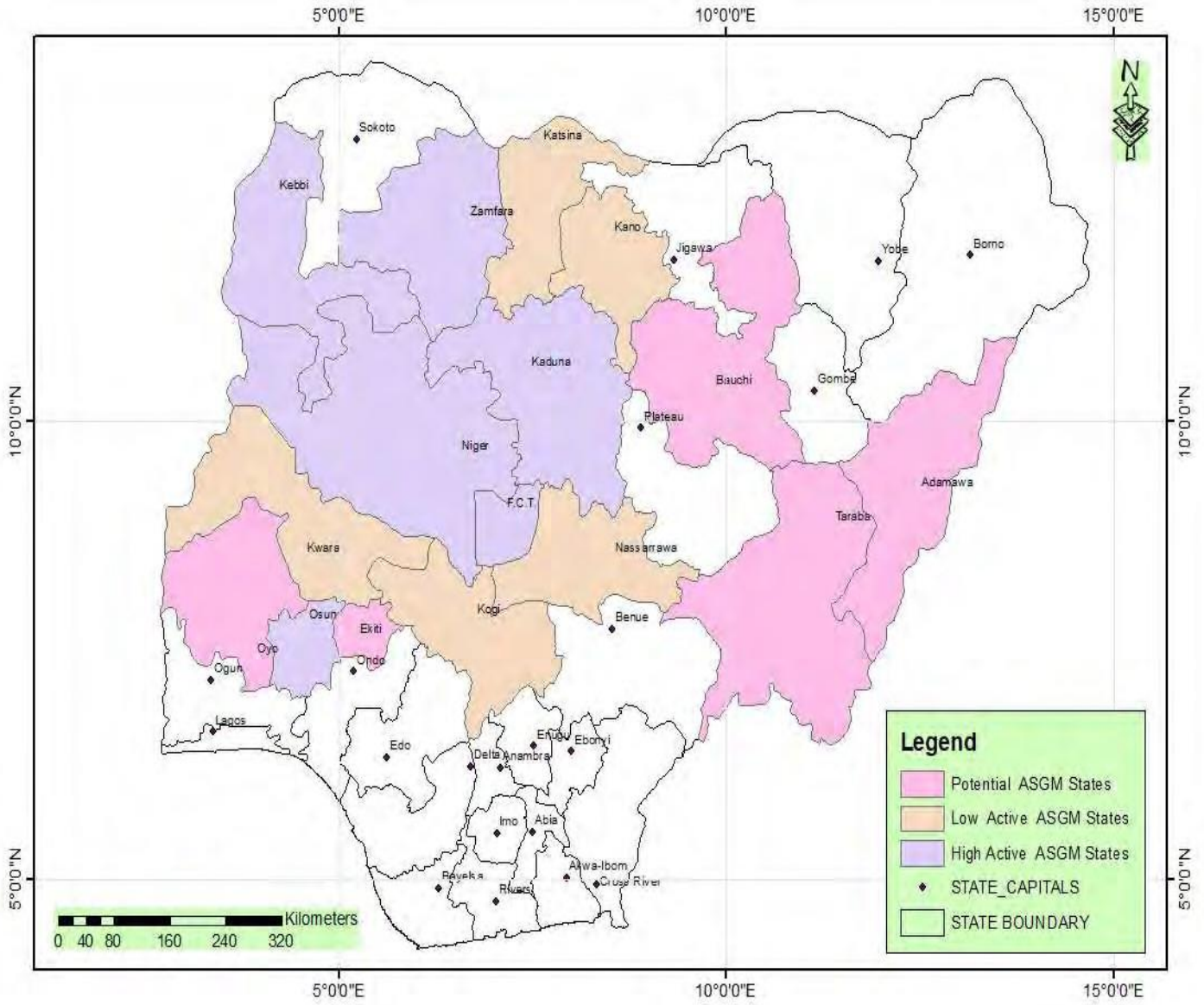

Figure 1. Active and potential ASGM States in Nigeria

The fact that local people engaged in the use of mercury in the Artisanal Small-Scale Mining of Gold is indicative of the failure of the government in the war against mercury pollution.

ASGM is currently taking place in some states namely Osun, Niger, Zamfara, Kaduna, Kano, Nasarawa, Kano, Kebbi in Nigeria including the Federal Capital Territory Abuja. Mercury's role

in gold extraction particularly in the ASGM has been a subject of considerable interest. In virtually all the States in Nigeria where gold is mined by artisanal and small-scale miners, mercury is used to extract gold. In artisanal and small-scale gold mining (ASGM), mercury is used to form a gold-mercury amalgam, which is then heated to purify the gold, with almost all the mercury lost to the environment thereby causing mercury pollution.

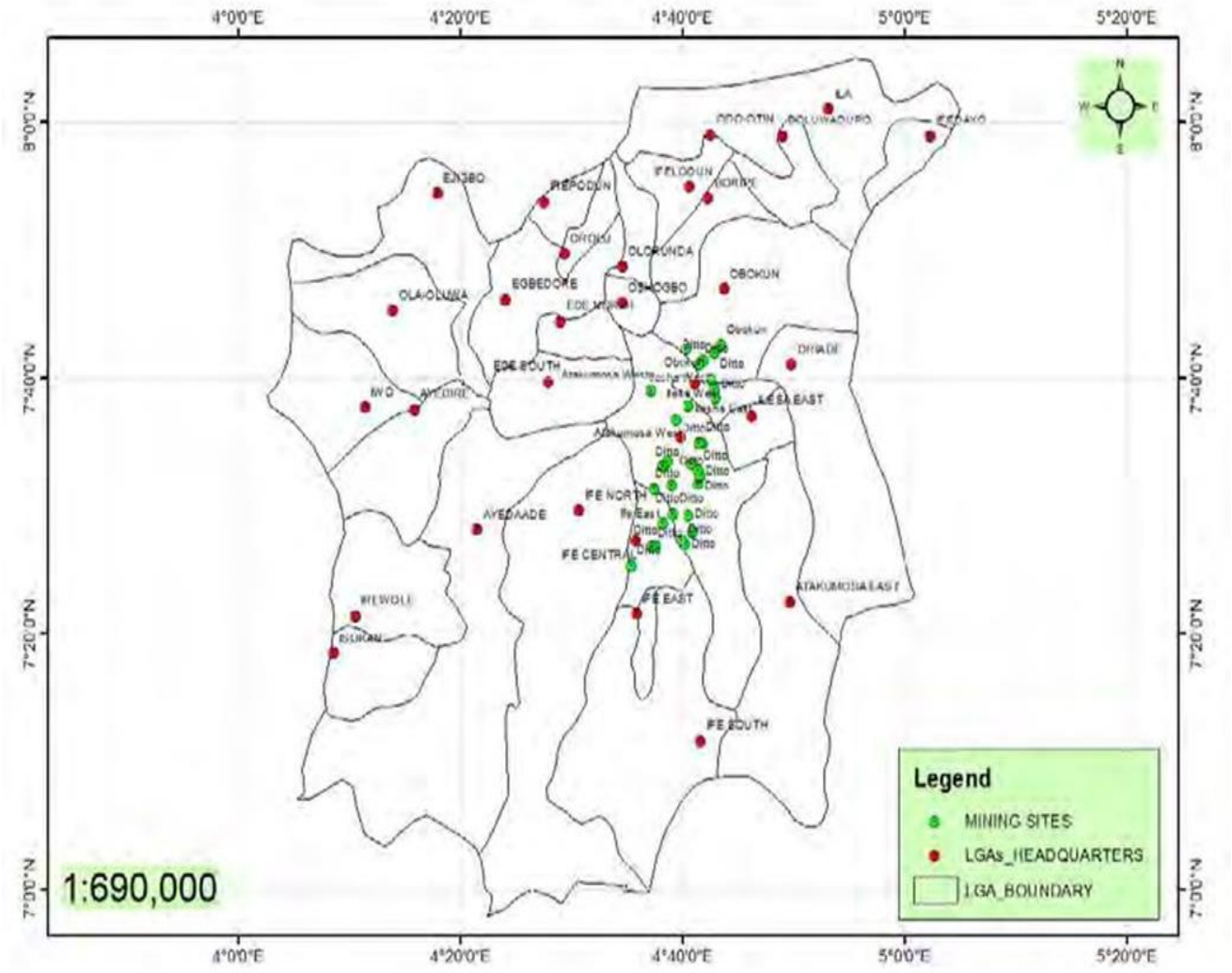

Figure 2. ASGM locations in Osun State

Apart from hosting Nigeria's only largest commercial gold mine facilitated by a Canadian-listed gold developer Thor Explorations and its local subsidiary, Segilola Resources Operating Ltd, Osun State have several ASGM occurring in many communities particularly around Osun River. These communities where ASGM is taking place include Atorin-Ijesha, Igun-Ajesha Iponda, Araromi, Itagunmodi, Idoka, and Obokun among others host the illegal gold mines in Osun state,

Zamfara State has been at the epicenter of illegal Gold Mining operations with its vast security, environmental impacts and livelihood implications. The environmental effects include land deforestation and degradation following illegal cutting down of trees and clearing of forests to give way to digging of pits and the destruction of natural landscape of the area as result of erosion. The State have more than 21 artisanal gold mines cutting across six Local Government Areas, covering about 219 KM2[xxi].

Findings from data obtained from the Mining Cadastre Office in Niger State, in September 2024, a total of 578[xxii] mineral titles were issued by the Niger State Government to mining operators in the state, out of which 369[xxiii] were granted for gold mining alone which demonstrates that there is a widespread occurrence of the metal in the state. The active mines for Gold are reportedly located at Gidan Mai wayo (Katcha LGA), Zumba (Shiroro LGA), at Suleija, Kontagora, Rafi, Agwara, Borgu, Munya and Paiko. According to information provided in the NAP, miners in Niger State as a whole produced 2,297.18 kg worth of Gold but used 2,797.12kg worth of mercury

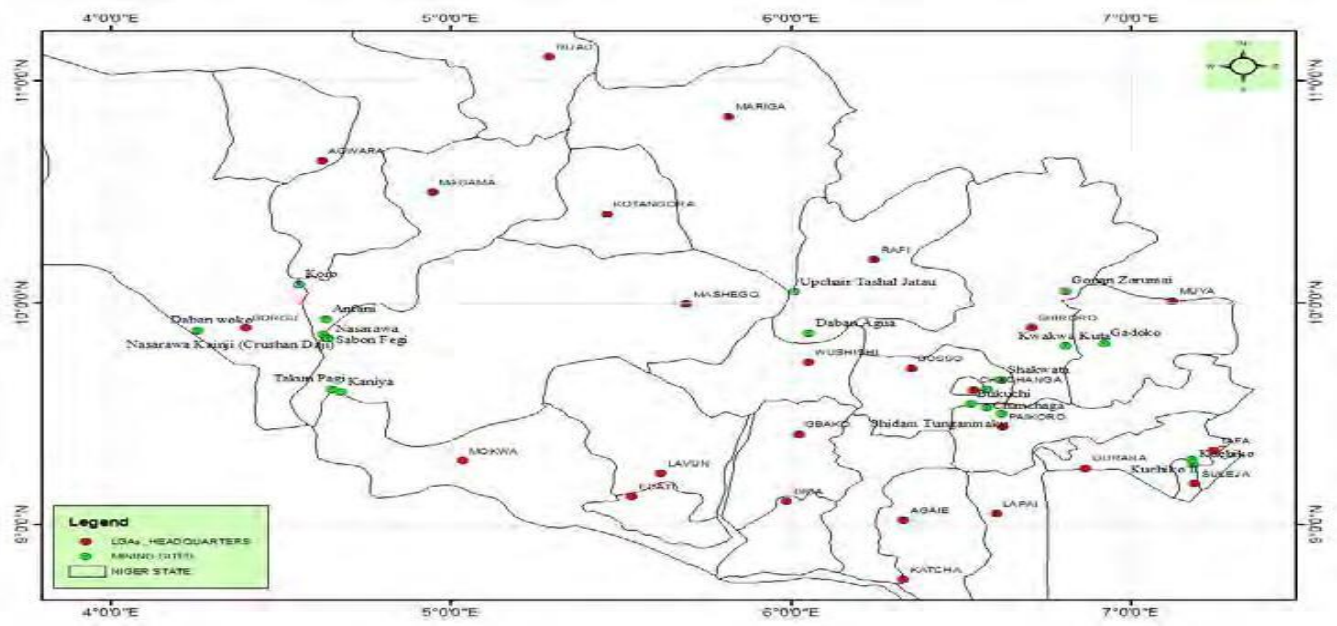

Figure 3. ASGM Sites in Niger State

Other areas where ASGM has been identified with devastating impacts from mercury pollution include Abuni[xxiv] and Uke[xxv] in Nasarawa state while it also exists in Gada Biyu Toro[xxvi], Bauchi State.

In Kebbi State, ASGM is also taking place in the Fakai, Bagudo and Shanga areas of the State. Over the years, small-scale mining[xxvii] has been an important part of the livelihood strategy of some rural dwellers endowed with mineral resources especially gold. Their mining operations are still very hazardous and have limited knowledge about the dangers inherent in their usage of cyanide and mercury in the extraction of gold. Based on available data from the NAP, Kebbi annual gold production is 484.22 kg and an estimated annual mercury usage of 587.07kg.[xxviii]

Other states where ASGM is going on with the active use of Mercury include Katsina, Kaduna, Kwara, Borno, Taraba, Plateau and Yobe States and Federal Capital Territory.[xxix]

In Kaduna, ASGM is widespread. According to the National Action Plan on ASGM, about 23 ASGM locations have been identified with annual gold production of 2,476.09 kg and an estimated annual Mercury usage of 3,257kg.[xxx]

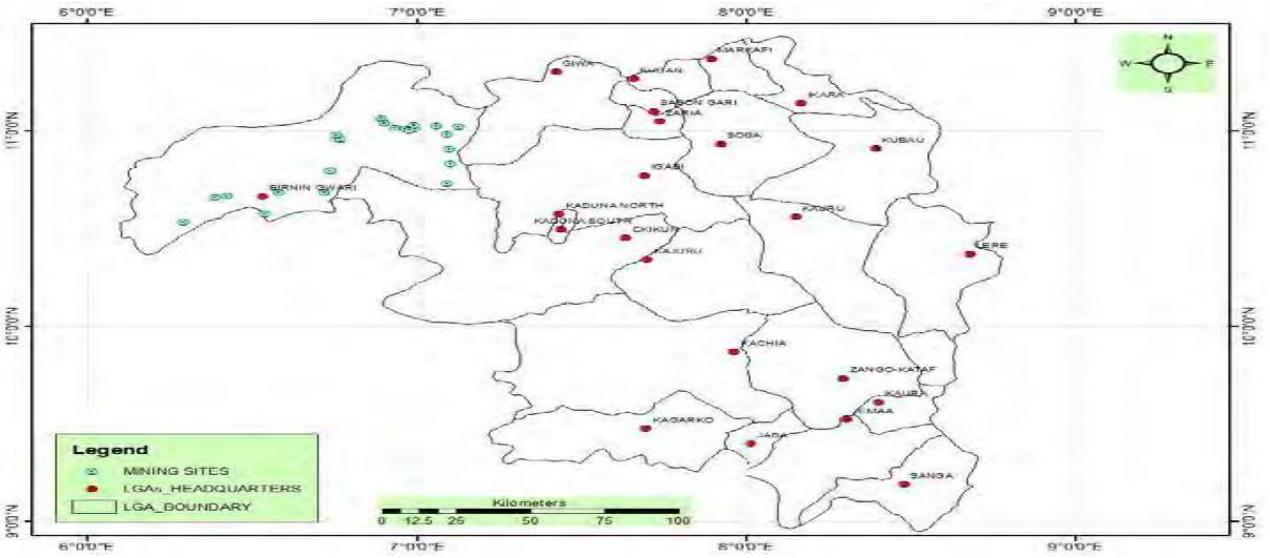

Figure 4. ASGM Sites in Kaduna State

(Figures 1-4 are adapted from the National Action Plan for The Reduction and Eventual Elimination of Mercury Use in Artisanal and Small-Scale Gold Mining in Nigeria-2021)

CONCLUSION

Flowing from the above, it can be seen that there is the preponderance of ASGM in the mining areas of Nigeria accentuated by the active deployment of mercury in the extraction process. The prevalent use of mercury in artisanal mining further exacerbates pollution, impacting water quality and posing severe health risks to local communities. These pollutants can be avoided and

alternative technologies be introduced for safe and clean extractive activities thereby ending the destruction of our aquatic ecosystems including reversing the destruction of habitats and loss of biodiversity.

The ease with local miners has had access to mercury to use in the ASGM processes is a clear indication that there is an insidious mercury trade going on in the country despite all the claimed government efforts.

This, therefore reinforces the very need for the Minamata Convention on Mercury to be amended to end the global legal mercury trade. It should also be amended to include the phase out of Mercury in ASGM by 2032. ***The time to do it is now.***

RECOMMENDATIONS

With widespread ASGM in Nigeria and its use of mercury in the process, we recommend the following:

1. We call on the Government of Nigeria to support the call for the amendment of the Minamata Convention to end the trade in mercury.

2. We also call on the Nigeria Government and other friendly countries to support the call for the amendment of the Convention to include a phase out of Mercury in ASGM by 2032.

3. The government, its agencies and CSOs should embark on massive awareness campaign and education programs particularly targeted at the rural population on the harmful effect of mercury on human health (especially the vulnerable groups) and the environment.

REFERENCES

[i] *National Action Plan For The Reduction And Eventual Elimination Of Mercury Use In Artisanal And Small-Scale Gold Mining (ASGM) In Nigeria- 2021 Pg 67*

[ii] *Nigeria Ratifies Minamata Convention: Https://Www.Basel.Org.Ng/Index.Php/Politics/118-Nigeria-Ratifies-Minamata-Convention*

[iii] *Michael Olugbode And Kasim Sumaina :12 May 2021 : FG Rolls Out National Action Plan For Mercury Use, Solid Waste Mgt: Thisday Newspaper https://www.Thisdaylive.Com/Index.Php/2021/05/12/Fg-Rolls-Out-National-Action-Plan-For-Mercury-Use-Solid-Waste-Mgt/ Accessed 27 April 2025*

[iv] *Resource Trade Earth Data*

https://Resourcetrade.Earth/?Year=2022&Exporter=566&Category=1512&Units=Weight&Autozoom=1

[v] *Nigeria Mercury Imports By Country In 2021: World Integrated Trade Solutions: Nigeria Mercury Imports By Country | 2021 | Data*

[vi] *National Action Plan For The Reduction And Eventual Elimination Of Mercury Use in Artisanal And Small-Scale Gold Mining (ASGM) In Nigeria- 2021*

[vii] *Chioma Umeha: NAFDAC Bursts Syndicate Behind Importation Of Mercury Into Nigeria: Daily Independent Newspaper September 15, 2023*

[viii] *National Action Plan For The Reduction And Eventual Elimination Of Mercury Use In Artisanal And Small-Scale Gold Mining (ASGM) In Nigeria- 2021 Pg 100*

[ix] *Richard Abel Goji & Telzing Ponsak Bala: Effects of Artisanal Mining on Land Degradation in Zamfara North-West, Nigeria 2024*

[x] *Anene, N.C.; Dangulbi, B.M.; Veiga, M.M. Assessment of Gold and Mercury Losses in an Artisanal Gold Mining Site in Nigeria and Its Implication on the Local Economy and the Environment. Minerals 2024, 14, 1131. https://doi.org/ 10.3390/min14111131*

[xi] *Environmental Law Institute. (2014): Artisanal and Small-Scale Gold Mining in Nigeria: Recommendations to Address Mercury and Lead Exposure. Washington, D.C.: Environmental Law Institute. ELI Project No. 121001.*

[xii] *National Action Plan for the reduction and eventual elimination of mercury use in Artisanal and Small-scale Gold Mining (ASGM) in Nigeria- 2021 Pg 71*

[xiii] *Environment Law Institute: Artisanal and Small-Scale Gold Mining in Nigeria: Recommendations to Address Mercury and Lead Exposure 2014*

[xiv] *Idowu Oladipo Samson et al: Mercury Contamination in Artisanal Gold Mining Area of Manyera River Niger State Nigeria*

[xv] *Nigeria Ratifies Minamata Convention: https://www.basel.org.ng/index.php/politics/118-nigeria-ratifies-minamata-convention*

[xvi] *Nigerian Mining Brief: https://assets.kpmg.com/content/dam/kpmg/ng/pdf/2024/06/Nigerian%20Mining%20Sector%20Brief.pdf*

[xvii] *'Gbite Adeniji: The Legal and Regulatory Framework for Mining In Nigeria: Paper Presented at the National Mining Policy Dialogue Conference and Exhibition organized by the Federal Ministry of Solid Minerals Development in collaboration with The World Bank July 12 – 14, 2004*

[xviii] *Bello, F. (2018). Nigeria: Mineral Policy. In: Tiess, G., Majumder, T., Cameron, P. (eds) Encyclopedia of Mineral and Energy Policy. Springer, Berlin, Heidelberg. https://doi.org/10.1007/978-3-642-40871-7_220-1*

[xix] *National Action Plan for the reduction and eventual elimination of mercury use in Artisanal and Small-scale Gold Mining (ASGM) in Nigeria- 2021 pg*

[xx] *Everything You Need To Know About The Presidential Artisanal Gold Mining Development Initiative (PAGMI)*
https://statehouse.gov.ng/news/everything-you-need-to-know-about-the-presidential-artisanal-gold-mining-development-initiative-pagmi/

[xxixxi] *Barde BG, Adeleye AO, Oladeji AA, Duhu YB. Heavy metals pollution and ecological risk assessment around artisanal gold mines in Zamfara, Nigeria. Environ Anal Health Toxicol. 2024 Jun;39(2):e2024016-0. doi: 10.5620/eaht.2024016. Epub 2024 Jun 7. PMID: 39054830; PMCID: PMC11294666.*

[xxii] *Niger State Grants 369 Gold Mining Titles After Lifting Ban-http//nigeriamining.com*

[xxiii] *Chika Otuchukere: Niger lifts mining ban, issues 369 gold titles to operators: 3rd September 2024 https://punchng.com/niger-lifts-mining-ban-issues-369-gold-titles-to-operators/ Accessed 20 March 2025*

[xxiv] *RDI, others petition Nasarawa over devastation in mining communities https://www.environewsnigeria.com/rdi-others-petition-nasarawa-over-devastation-in-mining-communities/*

[xxv] *Nnamdi C. Anene, Bashir M. Dangulbi and Marcello M. Veiga: Assessment of Gold and Mercury Losses in an Artisanal Gold Mining Site in Nigeria and Its Implication on the Local Economy and the Environment*

[xxvi] *Federal Ministry of Environment: New Gold Finds in Nigeria https://ngsa.gov.ng/wp-content/uploads/2020/06/Gold.pdf*

[xxvii] *Abubukar, M. Y, Zankan, J. A. A and Isah, M. N.: 2020: Impact of Small-Scale Mining on Rural Livelihoods In Some Parts of Yauri And Fakai Local Government Areas Of Kebbi State, Nigeria*

[xxviii] *National Action Plan for the reduction and eventual elimination of mercury use in Artisanal and Small-scale Gold Mining (ASGM) in Nigeria- 2021 pg 62*

[xxix] *WHO: Over 850,000 Nigerians in 12 States at risk of poisoning from mercury use: https://www.afro.who.int/news/over-850000-nigerians-12-states-risk-poisoning-mercury-use*

[xxx] *National Action Plan for the reduction and eventual elimination of mercury use in Artisanal and Small-scale Gold Mining (ASGM) in Nigeria- 2021 pg. 64*

ABOUT US

The African Indigenous Foundation for Energy and Sustainable Development (AIFES) was born out of the desire to bring together dedicated intellectuals and activists to start examining the nexus between energy justice, environmental protection, Climate Change and sustainable development of Indigenous communities, including implications on their economic and social well-being through scaled-up advocacy to promote and protect their inherent human rights from abuses.

AIFES was founded with the mandate to advocate and raise awareness of governments and the dominant society at large on situations of indigenous peoples, in relation to energy access, environment, human rights, good governance and perspectives on development and sustainability.

It is legally registered with the Corporate Affairs Commission (CAC) of the Federal Republic of Nigeria with Registration No. 166077 and is accredited to the African Commission on Human and Peoples' Rights (ACHPR).

We are headquartered in Port Harcourt, Rivers State Nigeria but have affiliates and partners all over the world.