

# Solid Minerals Sector Reform

## The Problem

Nigeria's large and untapped solid mineral deposits encompass over 34 mineral types situated in about 450 different locations across the country. Nigeria is truly endowed with several varieties of solid minerals such as metallic minerals, mineral fuel, gemstones, precious metals, and dimension stone. But as of the end of the first quarter of 2010, its contribution to GDP was an abysmal 0.29%. Yet, this government believed that the sector had the potential to generate employment, investments, and wealth for thousands of people across the country.

## Reform Actions

Consequent upon the determination that this sector was not performing as well as it could, the government set out to deliberately change the trajectory of the solid minerals sector through specific reforms, including:

1. **New Mineral Policy:** Development of a new minerals policy to encourage greater private sector participation in an environment of orderly and sustainable exploitation of solid minerals in Nigeria. The focus of this policy is to take full advantage of the rise in commodity prices in the global market and to achieve a substantial increase in the contribution of the sector to Nigeria's GDP. As part of this policy, the government also planned to produce a comprehensive and high quality geosciences data and formalise the existence of artisanal and small mining (ASM) operators.
2. **Minerals and Mining Act:** Continuation and improvement of the minerals and mining act of 2007 to ensure security of tenure, competitive fiscal terms, and private sector participation in the sector.
3. **Commerce 44:** A policy initiative to actively promote the exports of the following eleven solid minerals: tantalite, coal, gold, silver, ilmenite-rutile, cassiterite, bitumen, lead-zinc, iron-ore, wolframite and manganese.
4. **Mining Cadastre Office (MCO):** The MCO was created to administer mining titles with integrity and transparency on a 'first-come, first-served' basis.
5. **Fiscal Incentives:** This was designed to actively pursue and design attractive fiscal incentives for the solid mineral sector as a way of ensuring that the private sector is recognised as the owner and operator of Nigeria's solid mineral resources.

## Major Achievements

The solid minerals sector reform has achieved the following specific results:

**Geosciences Data Generation:** The government has completed the preparation of several comprehensive geosciences data set, which is critical to investment decisions in the sector. In particular, the government has produced the following:

1. Two databases, 27 new geological maps on 1:100,000 scale to bring the total from 70 to 97 and 37 maps on 1:5,000 and 1:10,000 scale for iron ore, coal, and ferrous-alloy minerals
2. Airborne magnetic survey of the entire country and airborne radiometric survey of required areas
3. Geochemical mapping of four global reference network cells, bringing the total of areas mapped to eight
4. Produced 2,385 interpreted airborne geophysical maps
5. Mapped 37 1:50,000 sheets made up of 31 sheets mapped in the NE-SE Axis Nigeria-Cameroon Mapping Programme and six sheets in the zonal mapping programme
6. Upgraded and equipped to world-class status, the geosciences research laboratories in Kaduna
7. Discovered high-grade iron ore resources assaying over 50% Fe in Gidan Jaja (Zamfara), Lamba (Bauchi), Gidan Buzu (Yobe), Jaruwa (Kaduna), Tama (Katsina), Ebiya and Agbado Okudu (Kogi State)
8. Drilled 23 core holes aimed at generating reliable geosciences data on iron ore (Jaruwa), gold (Bishini) and coal (Lafia-Obi) as well as facilitated the drilling of more than 500 core holes by the private sector in the course of their exploration activities
9. Dissemination of 1,073 geological maps and geophysical data sheets. Produced 4 1: 250,000 sheets, namely: 21 (Zaria), 43 (Abuja), 51 (Lafiaji) and 62 (Akure). Signed MoU with FUGRO for the use of their portal to disseminate geosciences data online.

**Discovery of New Minerals:** Ten additional minerals have been discovered in commercially viable quantities. This brings the total from 34 to 44. These minerals include: sillimanite for the production of refractories and spark plugs; chromite, cobaltite, vanadinite and stibnite, which are essential for alloy steel production; chalcopyrite (copper), lanthanum, pentlandite (platinum) are specialty minerals with high global demand; uraninite (uranium); and energy mineral.

**Enforcement of Compliance with Provisions of Nigerian Mining and Minerals Act (2007) and its Regulations:** This enforcement led to:

1. Establishment of Mining Cadastre Office (MCO) as an autonomous agency to administer and manage mineral titles in line with international best practices
2. Computerisation of the processes and procedures of granting mineral titles
3. Usage of the 'use it or lose it' principle of title administration, such that more than 10,000 dormant and inactive titles were cleaned up into active and productive mineral rights
4. Granting of 3,007 active mineral titles during the period under review
5. Revocation of all non-performing mineral titles resulting in increased revenue generation and increased activities by mineral title owners as shown by the recent NEITI Audit, thus creating more jobs

**Increased Steel and Metals Production:** Commenced and achieved 30% rehabilitation works on National Iron Ore Mining Company (NIOMCO) beneficiation line 2; and 91% installation works of NIOMCO super-concentrate plant. Supported the construction and expansion of steel production by privately-owned steel production companies including:

1. 700,000tpa WEMPCO steel plant cold rolling mill;
2. 500,000tpa billet mill African Foundry Ltd Lagos;
3. 150,000tpa cold rolling mill under construction at KAM Industries, Ilorin;
4. Construction of 150,000 tpa Rolling Mill at Abuja by African Foundries;
5. Expansion of total steel rolling mill at Kaduna to 100,000tpa;
6. Facilitated the production of 2.45million tonnes of steel products by private steel operators.

#### **Other Specific Achievements**

1. Establishment of a database on steel production and operating companies
2. Development and review of a draft Metallurgical Bill and submitted to the Office of the Attorney General of the Federation for further review and is now before the NASS for consideration and passage into law
3. Re-orientation of Ajaokuta Steel Company (ASCL) and NIOMCO Itakpe towards operationalisation with no government funding
4. Signing of MOU with REPROM Nig. Ltd for the operation of the light section mill and thermal power plant of ASCL
5. Completion of repairs of NIOMCO's Bergeaud Plant to be used in producing piecoat for the oil and gas sector
6. Development of MOU with ZSM/MZV for the operation of wire rod mill and engineering workshops of ASCL
7. Attainment of 90% completion of process flowsheet developments for the extraction of lead-zinc, tantalum-niobium and production of high alloy steel components and cast components at NMDC, Jos
8. Facilitation of the use of the local sand for foundry castings through the research efforts of the NMDC, Jos thereby saving the country significant foreign exchange
9. Formalization of 570 performing ASMs into certified cooperatives across the country
10. Completion and installation of the Igoli machine, Wet Milling machine and Crushers in Maru, Bukkuyum and Bagega areas as part of the safer mining of gold in Zamfara State to stem the effect of the lead poisoning of 2010
11. Reclamation of 17nos. High risk critically abandoned mines sites across the country
12. Promotion of Nigeria's minerals and metals potentials through the following:
  1. Establishment of Minerals and Metals Promotion Unit in the Ministry to inter-phase with relevant departments and agencies aimed at providing necessary information to investors
  2. Establishment of working relationship with governments and organisations of the following countries - Canada, Australia, and China, amongst others
  3. Ministry staff enjoying study tours and training sponsored by Australian government
  4. Signing of MOU with China on collaboration in geosciences data generation and technology transfer

5. Nigeria-Canada Mining Summit aimed at technology transfer in clean coal technology and bitumen exploitation

## Key Challenges

1. Illegal mining across the country remains a major challenge that needs to be addressed.
2. Investment in this sector is still low.
3. Weak enforcement of some mining regulations and weak inspection.
4. The task of getting productive and beneficial engagement of investors to maximise the huge benefits in the sector.
5. Increasing the contribution of this important non-oil sector to the GDP still remains a challenge.
6. Community Development Agreements (CDAs) signed resulting in the establishment of social licences for stress free mining operations.

## Assessment of Reform Initiative

Assessed against the 10 criteria for judging the success of government reforms initiatives, the reform of the minerals sector is making a significant progress.

S/No.	Assessment Criteria	Result of Assessment
1.	Have the solid minerals reforms improved the quality and quantity of public services?	Yes, as the reforms granted 3,007 active mineral titles within few years and disseminated 1,073 geological maps and geophysical data sheets, among others.
2.	Do more people now have access to services, including disadvantaged groups such as women, young persons, and people with disabilities?	There is wider access to service than before as many relevant data are available to local and foreign investors.
3.	Have the reforms reduced the cost of governance?	To some reasonable extent as private sector participation in the sector has the potential of reducing cost of governance. Establishment of Mining Cadastre Office (MCO) as an autonomous agency to administer and manage mineral titles in line with international best practices is a good example.
4.	Has the reform made the services more affordable for citizens?	Availability of mining information online widens access and makes cost affordable.
5.	Have the reforms reduced corruption?	Yes as the reform led to the computerisation of the processes and procedures for

S/No.	Assessment Criteria	Result of Assessment
		granting mineral rights thereby making it more transparent.
6.	Have the reforms reduced unnecessary bureaucracy and red tape?	The reforms have reduced bureaucracy and red tape through the use of ICT to make information available to users.
7.	Is the policy likely to lead to improved development outcomes?	The potential is very high as the reforms led to increased revenue to the government necessary for developing social services in the education and health.
8.	Are things improving, staying the same, or getting worse?	Things are improving in the mining sector with the discovery of new minerals and efforts to resuscitate the coal industry.
9.	Where things are improving, will those improvements endure?	The improvements will endure with the adoption of international best practices in its operation.
10.	Where things are not improving, what should be done?	Not Applicable

### Proposed Next Steps

1. Increase opportunities for local private sector participation and promote foreign investment in the sector to enhance job creation.
2. More effective regulation of mining activities and action to curb illegal mining.
3. Intensify promotion of foreign investment in solid minerals to stimulate job creation opportunities.