

## **NIGERIA'S SOLID MINERALS DEVELOPMENT – POLICY DIRECTIONS AND OBJECTIVES**

This document is in two parts. The first part provides a summary of the policy objectives and provides some recommendations on the steps to be taken by Government to achieve the objectives. The second part is the background information necessary for the understanding of the why and how the policy objectives were derived. Needless to say that the work is a compilation of input from several members of the committee and is acknowledged. All criticisms are welcomed and will be considered in a positive spirit.

## **PART I - SUMMARY OF POLICY OBJECTIVES**

### **BASIS FOR ACTION**

There is a need to development a business climate and mineral development which seeks to actively support by policies, action and strategies that are conducive to investment.

The Mining industry is now a global industry, with many countries competing for dollars spent on mineral exploration. The fierce international competition suggests that mining companies and their investments funds would only go to those countries where the enabling environment would allow the private sector to flourish without hindrance.

The Federal Government creating an enabling environment that will enable business to flourish. The enabling environment with respect to the mining sector *inter alia* includes the development of a new and modern legislative framework. The legislative framework will contain strong provisions removing all impediments to the private sector leading the development of the mining industry in the country.

The participation in ownership and management of mineral resources should separate the distinctive role of the Federal Government as regulator/administrator from that of the private sector as operator and manager.

The mineral rights and prospecting information should be radical departure from the existing opaque nature of the sector and the transformation to a system of transparent access, flexibility and mobility of mineral rights. The access to mineral rights should be secure and safe for exceptional cases should be free from interference from Government.

A clear role for the Federal Government is in articulating policies and their implementation and the collection, collation storage, dissemination and archiving of geoscience information and knowledge both for wealth creation and public interest and patrimony

It is important to address the issues relating to the socio-economic well-being of the people with both direct and indirect contact with the mining industry. The health and safety, housing needs of the miners and the mining communities should be of paramount consideration in the progressive development of the sector. The social impact of migrant labour and industrial relations should be considered in tandem with the expansion of the mining industry.

The act of mining is a wasting asset in direct economic and environmental terms. The challenge of generational equity posed by mining should be addressed and the damaged to the environment should be limited to the barest minimum. The knowledge and technology inputs for sound environmental managements should be encouraged

The need to encourage regional co-operation in the sharing of information knowledge, capacity building and

market promotion is important. A major need is the adoption of common standards and practices.

The governance structure of the sector should be transparent, friendly and have the interest of the community at heart. It should provide benefit streams and social equity for the communities living on the land where minerals are found.

## **Government Policy**

These are the things that government will do to facilitate

- Government will seek to create a macro and regulatory environment conducive to economic growth and development, in which the mining industry can make effective use of its human and capital resources.
- Government will seek to create an enabling environment for States and LGs to maximize the positive role the mining sector can play in promoting rural economy.
- Government will encourage States and Local Governments to capitalize on the comparative advantage associated with mining activity in their area of jurisdiction and will support mutually beneficial partnership between the mining industry and States and local governments.
- Through the new Labour Act and the specific industry-level and workplace structures it creates, Government will facilitate improved industrial relations in the industry.

- Government will seek to ensure, within the constraints of its available resources, the efficient provision and functioning of the physical, social and institutional infrastructure necessary for the competitiveness of the mining industry.
- Government will ensure the effective organization and accessibility of public information about the minerals sector.
- Government will aim to lower barriers to entry to prospective new investors in the industry.
- Government will seek to ensure the benefit streams to the communities who live on the land from which mineral resources are derived.

### **Government Policy on Fiscal Issues**

Government will maintain and promote a stable legal and fiscal climate that does not inhibit the mining industry from making the fullest possible contribution to the national, state and local economy. In developing mining tax policy,

Government is committed to ensuring that the tax regime will be consistent and stable and that the aggregate rate of tax will be internationally competitive.

- a. redemption of capital expenditure in mining;
- b. capital allowances for mining;
- c. ring-fencing;
- d. tax deductions for exploration;
- e. a tax on mineral rights; and

## **Ownership of Mineral Rights**

- Government recognizes the inherent constitutional powers and ownership of all minerals by the Federal Government
- Government's long-term objective is for all mineral rights vested in the State to be utilized for the benefit of and on behalf of all the people of Nigeria by providing the enabling environment for private sector to run profitable mining operations in the country
- State-owned mining companies will be privatized to ensure non-competition of Government with the Private sector in mining activities.
- Government will no longer act as owner/operator but rather as regulator/administrator to allow the Private Sector to take the drivers seat in the development of the minerals sector.
- Government will promote minerals development by applying the "use-it or lose-it"/"use-it and keep-it" principle.

## **A New System for Granting Access to Mineral Rights**

A new system for granting access to mineral rights will apply:

- i. The ownership for all minerals constitutionally vests in the Federal Govt.
- ii. Government will develop detailed legislative proposals for the introduction of the new system of access to all

mineral rights. In developing such proposals provision will be made for:

- a. guaranteeing the continuation of current prospecting and mining operations.
- b. a transitional period to allow holders of prospecting, mining and mineral rights to license the operations referred to in (a) above, as well as extensions which are necessary to provide for the continuation of such operations;
- c. a transitional period to allow holders of prospecting, mining and mineral rights to license *bona fide* intended prospecting and mining operations in cases where (a) and (b) above do not apply;
- d. a general notification to allow holders of prospecting, mining and mineral rights to substantiate in respect of areas other than those contemplated in (a), (b) and (c) above, why licenses for prospecting and mining should not be granted to another party in accordance with the "use-it and keep-it" principle;
- e. granting of prospecting and mining licenses to applicants without the consent of the holders of prospecting, mining or mineral rights who have not been licensed in terms of (b), (c) and (d) above;
- f. security of tenure by granting prospecting and mining licences for specified periods which are capable of cancellation or revocation only for

material breach of the terms and conditions of the licence;

- g. registerable prospecting and mining licences which will be transferable with the consent of the State;
- h. the holder of a prospecting licence to be entitled to progress to a mining licence on compliance with prescribed criteria;
- i. annual minimum work and investment requirements to discourage the unproductive holding of prospecting and mining licences;
- j. a retention licence which may, upon written application, be granted to an applicant in cases where the applicant, having explored the area and established the existence of an ore reserve which is, at the time of completion of the exploration programme, considered to be uneconomical due to prevailing commodity prices (market conditions) or where the exploitation thereof might lead to market disruption not in the national interest. Such licence will enable the holder thereof to retain the reserve without the commitment to minimum work and investment requirements. The licence will be granted for a limited period in respect of the property concerned;
- k. precluding the granting of a prospecting or mining licence over an area in respect of which a

currently valid prospecting retention or mining licence is held for the same mineral;

- l. predetermined standard terms and conditions, for all prospecting and mining licences;
- m. the reduction, as far as possible, of discretionary powers by applying standard requirements or objective criteria;
- n. payment of prospecting fees or royalties by the holder of the prospecting or mining licence to the registered holder of mineral rights. Such prospecting fees or royalties will be determined by the State after consultation with the registered holder of the mineral rights. In determining such fees and royalties, prospecting fees and royalties payable to the State will be used as a guide. The quantum of prospecting fees and royalties will be internationally competitive and will not inhibit the initiation of new projects;
- o. payment of a surface rental, determined by the State after consultation with the landowner, by the holder of a prospecting or mining licence to the registered land owner; and
- p. the processes of considering the granting of a prospecting or mining licence and the approval of an environmental management programme to run concurrently and to grant the prospecting or mining licence and approve the environmental management program simultaneously.

## **Reconnaissance Work**

A non-exclusive permission for broad-based, non-destructive exploration will be implemented. Such permissions will be for a limited period in respect of the area required. Reconnaissance permission will not entitle the holder thereof to a prospecting or mining licence.

## **Disclosure of Prospecting Information**

It will be a condition of any prospecting licence or reconnaissance permission that all information and data from prospecting shall be submitted to the State after completion or abandonment of any particular prospecting activity.

The Government will release such information to the public at any time from the date of submission of such information unless the prospector retains a prospecting retention or mining licence in respect of the land concerned or an application therefore is pending. Such information submitted to the Government will be used to create a national exploration data base.

## **Database of Mineral Rights Holdings**

Government will through the Geological Survey of Nigeria Agency seek to obtain the additional resources which will be necessary in order to compile a readily-accessible data base.

## **Disincentive for Non-utilization of Mineral Rights**

Government will through the new legislation impose disincentives which would be intended to discourage the non-utilization of privately-owned mineral rights. Such disincentives will not apply in respect of areas where currently valid prospecting, retention or mining licences are held.

## **SMALL SCALE MINING**

### **Mineral Rights**

Information on mineral rights and mineral deposits available for development will be made accessible, particularly for the benefit of small-scale miners.

### **Access to Finance and Technology**

- Access to funding for small-scale mining will be encouraged and facilitated through appropriate and targeted institutions.
- The costs of state advice and support for the small-scale mining sector will be weighed against the benefits of the application of such support to other mining or non-mining activities.
- The Ministry of Solid Minerals Development will co-ordinate needs-driven research by the National Council on Science and Technology and ensure that this

information and technology is accessible to the small-scale mining sector.

- The Ministry of Solid Minerals Development, in consultation with private industry, organized labour, non-governmental organizations, tertiary institutions, research organizations and foreign aid agencies, will investigate the establishment of training facilities for small-scale miners, not only in Nigeria but in the region as a whole.
- Information on all aspects relating to mineral development and exploitation will be made available by the Ministry of Solid Minerals Development by means of a "one-stop shop" approach.
- All spheres of government and development agencies will work towards coordinating their activities in respect of the promotion of small-scale mining activities.
- The capacity of the Ministry of Solid Minerals Development will be enhanced to efficiently facilitate small-scale mining support on the broad spectrum of activities involved in such endeavours. The Ministry will further facilitate the establishment of a self-sustaining institutional support mechanism for small-scale mining.
- Government will facilitate the mutually beneficial co-existence of big and small-scale mining operations.

### **Regulation and Administration**

- Mining regulations will be administered consistently, while adopting an approach of guidance and advice towards small-scale miners.

- The Ministry of Solid Minerals Development, in conjunction with other relevant Government departments, will streamline the regulatory and administrative procedures in respect of mineral exploration and exploitation.
- Health and safety standards will be maintained in small-scale mining operations.

### **Environmental management**

- Small-scale mining, like the rest of the mining industry, will be required to adopt measures that will promote environmental sustainability by means of the application of consistent standards and acceptance of the "polluter pays" concept.
- Government will support the provision of training and skills development for small-scale miners in environmental management.
- Intensive environmental management guidance will be provided in areas where there is a high concentration of small-scale miners.
- Financial guarantees for rehabilitation will be flexible and site specific.

### **BENEFICIATION**

The Government recognises the important of beneficiation in adding value to commodities produced in the country. In addition to adding value, beneficiation will allows the commodities to meet appropriate standards for use where

the natural products does not meet the requirements for specified use

- A greater degree of co-operation and co-ordination will be established between the Ministry of Solid Minerals Development and Industry in respect of mineral beneficiation.
- In order to promote mineral beneficiation, efficient supply-side measures will be introduced, such as lower royalty rates for projects that include beneficiation. Qualification for such incentives will, however, require a commitment to promote further local downstream beneficiation through, inter alia, export parity pricing of products.
- Government is committed to promoting investment in mineral beneficiation activities through ensuring competitive and stable costs of public services and goods, such as electricity and transport.
- The State will continue to support research with a view to developing new or improved beneficiation techniques and to developing new applications for locally produced mineral products.
- Geological Survey of Nigeria Agency and other Science and Technology initiatives will endeavour to establish joint-venture research and training programs with universities and the private sector in order to produce the necessary skilled and productive manpower required for mineral beneficiation developments.

- Decisions regarding beneficiation projects will be based on sound economic and market principles, monitored by the Ministry of Solid Minerals Development.
- Prices for minerals and processed mineral products will be determined by the market.
- Policies and regulations that constrain the downstream development, for example in the local jewellery manufacturing industry, will be reviewed by the Ministry of Solid Minerals Development and other departments and institutions involved.

## **PROMOTION & MARKETING OF MINERALS**

- The marketing of Nigeria's minerals will be determined by market forces. State intervention will generally be limited to addressing market failures.
- Barriers, economic and otherwise, to mineral exports will be identified and appropriate strategies for their removal will be devised. All measures which restrict the sale of Nigeria's minerals on foreign markets will be opposed.
- Transfer pricing will be dealt with by the application and enforcement of laws. To this end co-operation and co-ordination will be established between the Ministry of Finance and the Ministry of Solid Minerals Development.
- Government will encourage and support market development by producers.

- Government recognizes that the transformation of the country into the preferred mining destination for global capital requires the promotion of (i) the country's mineral endowments; (ii) the existence of more investor friendly fiscal, legal and regulatory framework; at both domestic and international forums;
- Government will support all such strategies adopted by the Ministry of Solid Minerals Development aimed at bringing to the attention of the investor public, the significant opportunities within Nigeria's mining sector, including efforts at re-branding itself to becoming more responsive to the needs of stakeholders in the mining sector and more market-facing.

## **RESEARCH AND DEVELOPMENT**

Research and development efforts will be needs-driven and directed to develop solutions in exploration, mining, processing, beneficiation and environmental conservation and rehabilitation of the environment as well as to satisfy the needs of global customers and to exploit the value adding potential of the country's minerals. This applies to large and small-scale mining. The work on research *inter alia* will focus on the following areas:

- Research on occupational health in the mining industry will be implemented as part of the mine health and safety research programme. A system of matching

grants will be considered for funding research and development projects.

- Focused and coordinated research on economic geology will be supported by Government and industry to attract exploration investment to Nigeria
- Co-operation between the various mining and mineral processing research and development institutions will be encouraged to make best use of existing facilities, to promote collaborative research efforts, to promote technology transfer and to ensure that minerals-related research and development is conducted in accordance with the country's science and technology policy and national objectives for the minerals industry.

## **PART II - BACKGROUND TO THE POLICY**

### **MACROECONOMIC FRAMEWORK**

#### **Population**

The population of Nigeria is estimated at 130 million making it Africa's most populous and diverse country. It is one of the most densely populated countries in the world with an average population density of about 124 persons per sq. km. It has been claimed that one out of every five Africans is a Nigerian.

#### **Political Context**

Nigeria was governed through a succession of military rules until 1999. Following the return to democratic governance, the government has made tremendous efforts to kick-start the process of building a stable democratic system, revitalising the economy and reducing poverty.

The policy on development of solid mineral resources must take active cognisance of the three-tier governance structure, comprising Federal Government in the Federal Capital Territory, thirty-six (36) States Governments, and seven hundred and seventy-four (774) Local Government Areas (LGA). Recognition may also be given into the six geo-political zones sometimes used for administrative convenience.

The era of military dictatorship created a negative impact on the people of Nigeria. It has denied Nigerians their political rights, compromised their universal human rights; sustained

under-development which has led to extreme poverty for at least 55% of the population. Military rule contributed to the decline of Nigeria's political systems and civilian institutions, leaving a legacy of deep seated corruption, weakness of government accountability and transparency; misallocation of oil revenue and government mismanagement.

The Policy must also recognise Nigeria's political importance in ECOWAS and the role that it plays in Africa through its leadership role in NEPAD as well as membership of other relevant international organisations especially the UN systems, and the World bank group

### **The Economic Context**

Nigeria is well endowed with huge potentials and resources. It is the 13<sup>th</sup> largest producer of oil in the world and the 5<sup>th</sup> largest in OPEC. When Nigeria's gas is fully exploited, it will become one of the top ten gas producers in the world. Since 1970 the income generated from oil has totalled more than US\$320 billion.

In Sub-Saharan Africa, Nigeria's economy is the second largest. However Nigeria is highly vulnerable in terms of food scarcity; it is highly indebted externally and has a GDP of 3.5% per year which is barely above population growth of around 2.6%

An over dependent economy on oil has left the other sectors of the economy, most notably solid minerals, agriculture and

manufacturing, under-developed and impoverished. The contribution of solid minerals to the GDP has consistently been below 0.4% for more than a decade. This low contribution is considered unacceptable by most experts on development especially when seen against the background of recent phenomenal rise of the contribution of mining sector to the growth of many other countries in Africa. Precise information on the quantity of investment attracted by Nigeria over the last decade, is not available but indications are that the figure is still a paltry sum. Nigeria, unlike some other African countries (Botswana, Burkina Faso, Ghana, Mali, Tanzania) has not benefited from the 1990-2000, seen as the decade of boom in mineral exploration in Africa.

### **Social Context**

It is estimated that 55.8 million people (48.5% of the population) are living below the universal poverty line of \$1 a day. Rural poverty remains high but there is increasing rapidly. Majority of Nigerians live in rural areas and agriculture forms the basis of their livelihoods.. Nigeria ranks 156<sup>th</sup> out of 178 countries in the UNDP Human Development Index, making it one of the poor countries in the world.

The extent of the poverty and the ramification in terms of both income and non-money dimensions constitute a major challenge in Nigeria. The incidence of poverty whether defined by absolute or relative poverty is growing rapidly in Nigeria. For example, in income terms, the incidence of poverty has grown from 27.26% in 1980 to 46.3% in 1985, and

65% in 1996. A recent UNDP publication stated that “the poverty profile of Nigeria does indeed present a sombre picture of a rich nation in decline”.

## **Gender**

Women in Nigeria make up 46.9% of the population (1991 Census) and they provide the main labour force on food production in addition to their social responsibility.

Although there are a growing number of women in higher positions in government the situation for the average woman is still weak. Research on gender and quality of life in Nigeria reveals that women are:

- more likely to be illiterate,
- less likely to own land or to have any independent source of income,
- likely to have a lower life expectancy due to high maternal death rates and the depletion of their nutritional status from the physical burden of being mother to roughly 6 children.
- Economically generally poor, underemployed and unfairly rewarded;

There is a growing but insufficient numbers of women in position of power to enable the voices of poor women to be heard.

## **Education**

Nigeria has a relatively large pool of well educated people - the highest level in sub-Saharan Africa, but the overall literacy level in Nigeria is decreasing. The literacy figures are now about 57% of the population. The policy recognises the pool of talent for the sector both within and without the borders of Nigeria. It also recognises the need for addressing the capacity gap through partnership with institutions and personnel with access to knowledge and technology from more advanced nations.

### **Background to the New Policy**

Following the global economic recession of the late 1980s and early 1990s, developing countries started liberalising their external trade to improve balance of payment, increase economic growth through the provision of incentives to attract capital in-flow and investment.

The many developing countries especially in African and Latin America turned to Solid Minerals exploration as a solution to sustained economic growth. Nigeria's, the economy which is dependent on a mono-product (petroleum) became vulnerable to fluctuations in oil prices with shocks on the economy. This informed the Federal Government's decision to diversify the nation's economic base from oil to the non-oil sectors including the development of solid minerals resources.

An internal analysis in reaction to the global economic recession led to key policy review which was completed and endorsed at the middle of the 1990s for implementation. The

policy review led to a number of important actions including the creation of the Ministry of Solid Minerals Development in 1995.

Following establishment the Ministry has developed over time a set of policy decisions and instrument to guide strategic action and provide direction for the development of the sector. The policy decisions and instruments include:

- The New National Policy on Solid Minerals Development, 1998
- The enactment of the Minerals and Mining Act, 1999
- Development of the Seven Year Strategic Action Plan for Solid Minerals Development in Nigeria, (2002 – 2009);
- Establishment of Geological Survey of Nigeria Agency as a stand alone Extra-Ministerial Department.
- Establishment of Sustainable Management of Mineral Resources Project - a World Bank assisted programme.

Previous policy decisions and instruments, although well meaning, have not produced the desired results and the outcomes for which they were developed. As a result of the sector to develop beyond the bucolic level, it became apparent that a reform of the policy is required. This is needed to respond to the changing environment in the global mining industry and to situate this within the context of Nigeria's development agenda especially the National Economic Empowerment and Development Strategy 2004.

### **Drivers for Change**

The major drivers for change for the new policy are:

- a) The need to develop a business environment where the private sector will flourish as well as encourage the private sector to take leadership role in the development of the sector.
- b) The need for the clear separation of roles of government as the administrator from that of the private sector as the operator of mineral rights
- c) The need for institutional integrity, transparency and accountability in the access to, and retention of mineral rights
- d) The realisation of the importance of artisanal and small scale mining to sustainable livelihoods for many Nigerians

- e) The need for social equity and to improve the benefit streams to people living on the land where minerals are found.
- f) The need to acquire, store and disseminate credible information and knowledge of the mineral endowment, in Nigeria to the investor and the wider public.
- g) The need to ensure adequate supply of mineral resources for industrial development, wealth creation and for the maintenance of national security.
- h) The need for sound environmental management and intergenerational equity for wasting assets.
- i) The need for a robust and transparent mining law that encapsulate all the drivers for change listed above.

### **Nigeria's Mineral Endowment**

The world is presently undergoing resurgence in commodity both in terms of demand and prices. The resurgence is being fueled by rapid growth in China and India. The need for commodities, especially metals responds to expansion into western style middle class life style by citizens of these countries.

There is currently limited known world class mineral deposit in Nigeria. This is largely due to lacuna in exploration interest and minimal investment in the sector following the discovery

and production of oil. The Geology of Nigeria is comparable to those of other countries where world class deposits have been found and many experts believe that is no scientific reason why such deposits cannot be found in the country but for adequate exploration.

The Geology of Nigeria is composed of four main groups known as the Basement Complex, the Younger Granites, the Sedimentary series and the Tertiary-Recent Volcanic rocks.

### **The Basement Complex**

The Basement Complex of Nigeria occupies the central part of the Pan-African mobile belt, which lies between the West African and Congo cratons. It occupies about half the surface area of Nigeria. It is composed of three major rock packages:

1. The migmatite-gneiss complex.
2. The schist belts composed of metasedimentary and metavolcanic rocks.
3. The pan-African Granitoids comprising the Older Granites and associated charnockitic rocks

### **The Younger Granites**

The Younger Granites are distinct from the Older Granites (Pan-African granitoids), and are high-level anorogenic

volcanic and hypabyssal rocks emplaced within the precambrian basement complex. They are characterized by arcuate to circular intrusions and represent one of the classical occurrences of ring complexes in the world. They form the southern extension of similar ring complexes in Air, Niger Republic. Together the more than 70 individual ring complexes constitute a distinct petrological province. Along with the tertiary volcanic rocks, they occupy less than 1 percent of the surface area of Nigeria.

The ages of the ring complexes in this province vary systematically from the late Pan-African in Air, Niger in the north, to the cretaceous, about 14 million years, in the Afu complex on the northern banks of the Benue River in the south. The Nigerian occurrences range in age from 313 to 141 million years.

### **The Sedimentary Series**

The sedimentary rocks of Nigeria were deposited in seven basins surrounding the crystalline rocks. They outcrop over about half the surface of Nigeria. Five of them, the Niger Delta Bida, Benue and Anambra basins appear to have initiated in the Cretaceous and are related to the opening of the Gulf of the Guinea. The remaining two, the Sokoto and Chad basins are part of the Taodeni and Illumedden basins respectively, which outside Nigeria have histories dating back to the paleozoic.

Tectonically, the sedimentary basins can be classified into two groups:

- Marginal Sag Basins - the Niger Delta, and the Benue fall in this category. They were formed in response to the tensional regime which accompanied the opening of the Equatorial Atlantic during Aptian and Albian times. The marginal sag structure is the result of the collapse of the margin on the oceanward side due to sediment loading; and
- Intra- Continental Basins - these include the Sokoto, Chad, Bida , Anambra and Benue Basins. The Sokoto basin is a simple interior sag basin. The others were formed during the Cretaceous either by distension resulting in grabens bounded by normal faults or by localized tension caused by large-scale transcurrent faults.

The sedimentary material filling the basins shows complete cycle development, characterized by continental facies in the basal section overlain by marine facies and continental sediments. Some basins show repeated cycles.

### **The Tertiary - Recent Volcanic Rocks**

Volcanic activity has taken place intermittently from tertiary to recent times. The most extensive outcrops are in the Biu and Longuda plateaux of north-eastern Nigeria and on the Jos Plateau. Scattered occurrence are found within the Benue Trough. The dominant rock is basalt with alkaline

affinities. The basalt ranges from 22 million years to 7 million years in age.

These rocks have produced the following thirty-four mineral commodities distributed as follows:

❖ **Gold:**

Occurs within the Nigerian Pre-Cambrian Schist Belt which can be mined as primary, eluvial or alluvial gold at:

- a. **Okolom/Kogi State**, ( with mineral grade values ranging between 1.0-36g/ ton);
- b. **Dogon-Daji/Kogi State**, ( with mineral grade values ranging between 1.0-75g/ ton);
- c. **Waya/Kebbi State**, ( with mineral grade values ranging between 0.4 – 11.0g/ton);
- d. **Iperindo/Osun State**, (as primary gold estimated at about 2 million ounces of gold); and
- e. Other areas of gold occurrences include: Ogun, Adamawa, Edo, Kwara, Niger, Kaduna and Zamfara States.

### ❖ **Lead /Zinc:**

Deposits of lead/zinc occur mainly in the Benue Trough in association with good quantities of copper, silver, germanium and cadmium in the following locations:

- i. **Ishiagu-Abakaliki/Ebonyi State:** ( in veins within the wall rocks of calcareous shales, marl and mudstones).
- ii. **Akwana-Arufu/Bauchi and Plateau States:** ( in veins within limestone wall rock. Proven reserves of lead/zinc within the Nigerian Mining Corporation's Mining Lease is about 1,040,000 tonnes).
- iii. Other areas of lead/zinc occurrences include Taraba and Zamfara States and the Federal Capital Territory.

### ❖ **Specialty Metals:**

Occurrences of Tantalite, Niobium, Lithium and Beryllium have been recorded in areas underlain by gneisses, schists, Older Granites and pegmatites, mostly in Central Nigeria. About 35 ore-bearing pegmatites have been mapped with tantalite occurring in the disseminated form.

### ❖ **Coal:**

Low ash, low sulphur and medium to high calorific value coal, occurs in about 22 coal fields spread across the country. A total of over 500 million tonnes have been proven while reserves of over 2 billion tonnes have been estimated as detailed in the table below. (To be shown).

There are two underground coal mines at Okpara and Onyeama in Enugu State and two opencast coal mines at Owukpa and Okaba/Odagbo in Benue and Kogi States respectively.

#### ❖ **Bitumen:**

Extensive tarsands belt with proven reserves of 1 billion barrels of oil equivalent within an area of 17Km<sup>2</sup> and an estimated reserves of about 30 billion barrels of oil equivalent occurs along Lagos, Ogun, Ondo and Edo States. The Belt has been delineated into blocks for award to prospective investors.

#### ❖ **Industrial Minerals:**

Mineral for use in industry exist in most state of the Federation. These minerals include Limestone, Marble, Salt, Barytes, Bentonite, Gypsum, Clays, Phospahte, Trona, Grahite, Bauxite, Feldspar, Talc, and Kaolin.

#### ❖ **Gemstones:**

- i. Nigeria is richly endowed with good quality gemstones which up to date are still being exploited informally.
- ii. They include: Aquamarine, Sapphire, Beryl, Topaz Amethyst, Tourmaline, Emerald among others.

### **Geoscience Information Generation and Management**

The Geological Surveys and similar geoscience institutions world wide are responsible for collecting, archiving, processing and making available data concerning that unique portion of the Earth's crust which forms the foundation of the national territory.

The institutions provide national geoscience information service available to the nation's public and private sectors, to governmental and non-governmental organisations and to individuals within the population at large. Such information is fundamental to the sustainable development of national earth resources and the protection of its peoples from a wide variety of natural hazards.

The Nigerian Geological Survey will provide geoscience information for economic, social and environmental development of countries. Nigerian Geological Survey will utilize public funds to carry out regional mapping and mineral exploration to encourage further private funding, by investors, for detailed exploration and mine development.

Nigerian Geological Survey will provide baseline data to encourage exploration by the private sector for metallic

minerals, and will also be active in promoting the exploitation of industrial, non-metallic mineral resources, which has value in the national economy but may not generally attract large-scale foreign investment. The Agency will also provide services, such as laboratory services to the private sector.

### *Modernising the Geological Survey of Nigeria Agency*

Most of the Geological surveys were originally established to provide geological maps of their national territory and, largely, as an adjunct to this activity, to evaluate their national resource potential.

It is now accepted that modern Geological Surveys should focus on the acquisition, management, storage, interpretation and communication of geoscience information to promote their country's resource potential and thus to encourage investment in detailed mineral exploration from the private sector.

### **Legislative Framework**

The Legislative Framework of this policy is embedded in the Amended Minerals and Mining Act 2005. The important features of this framework are:

- The clear separation of roles of the Government from that of the private sector, including the emphasis on the lead by the private sector in the development of the Mining industry.

- The promulgation of transparent laws, regulations, and guidelines for regulation of the industry
- The provision for the security of tenure for holders of mining leases, first priority of refusal for holders of exploration licenses through the setting up of Mining Cadastre Office
- The creation of a favourable fiscal regime that will be beneficial both to the holders of the mining leases, the government and the communities living on the land where minerals are found
- The setting up of institutional frameworks for the generation, storage and dissemination of geological and mining information.
- The provision of transparency and access by the public to mining sector information.
- The provision of clear safeguards for health and safety and intergenerational equity with respect to the environment

### **Fiscal Policy**

In order to ensure efficient development of these resources, the Government has taken several steps and is implementing new reforms in the solid mineral sector to attract and encourage investors (local and foreign) to explore and

develop these known resources. These actions include the development of a new mineral act that contains a fiscal policy that would provide adequate incentives for prospective investors and also allow the country to build a stable solid mineral sector. The objectives and characteristics of the Fiscal Policy are described in the following paragraphs.

### **Objectives of the Fiscal Policy**

The basic principles underlying the Fiscal Policy for the mineral sector are to:

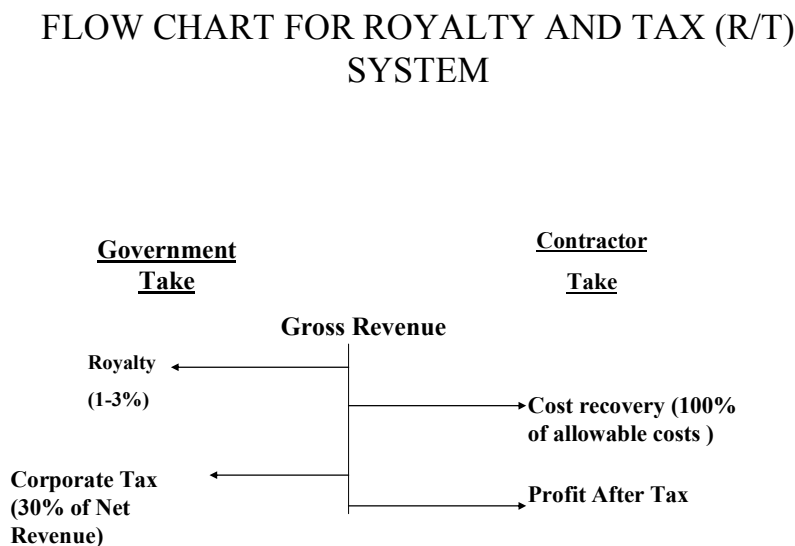
- ***Obtain optimum benefit for the country from present and future use of minerals, and earn or save foreign exchange;***
- ***Promote economic growth and development and encourage private investment in the sector;***
- ***Maintain Sovereignty and Unity;***
- ***Improve Quality of life of the people; and***
- ***Create employment (direct or indirect) for the people often in remote and economically depressed areas.***

### **Characteristics of the Fiscal Policy**

The proposed Fiscal Regime would consist of a **Royalty and Tax System**. This system has the advantage that it is simple to apply and, while it provides revenue early to the Government during the production life of the resource, irrespective of the level of profitability of the activity, it is transparent and easily accountable. The generally perceived downside of this system, in the form of a reduction

in company revenue and hence a negative impact on the early cash flow of the investor are minimized by the generous level of allowable cost recovery very early in the production life of the activity, exemptions from custom duties on imported mining equipment and materials and the low level of Royalty being charged. Furthermore, the royalty percentage will be governed by a timed graduating /sliding scale to ensure stability on revenue and also that both the Government and the investor enjoy economy of scale as the level of production increases in later years of the activities. The flow chart for this system is shown in Figure 1 while the details of the Policy are described in the following paragraphs.

**Figure 1:**



**Details of the Fiscal Regime for Solid Minerals**

#### 4. The general parameters of the proposed Fiscal

Regime are as follows:

- (a) **Government Take:** The overall Government Take will consist of Royalty plus the Corporate Tax. The Corporate Tax will be determined on net Revenue which is defined as Net Revenue = Net Smelter Return (NSR) – Royalty-Cost Recovery.
- (b) **Royalty.** To be graduated as follows: 1% of Net Smelter Return during the first 24 months of production and increased to 3% thereafter. Net Smelter return (NSR) is defined as NSR = Gross Revenue – (Shipping + Mineral Processing + Marketing Costs).
- (c) **Cost Recovery and Allowable Costs:** These are deducted before the calculation of Taxes and generally include Operating Costs, Depreciation and Amortization (DD&A) costs, Reconnaissance, Exploration and Mining Costs. Total amount to be deducted in any one year is not capped.
- In order to ensure that the investor recoups all its investment fast and early during the production life of the investment, the investor would also be allowed the following **deductions** before tax:
- **100% of all capital expenditure** in the year of investment (without any limit, i.e. not capped) ;
  - **100% of certified exploration and development expenditure** (including feasibility study and sample assay costs in the year incurred)

- **100% recovery of infrastructure costs** for mining purpose in the year incurred;
  - **100% of the amount set aside in any particular year for environmental protection and rehabilitation costs.** However, should this amount be more than required for implementing the rehabilitation program, the surplus would be taxed at the prevailing income tax rate; and
  - **Unclaimed capital cost** can be **increased by 5% annually** until fully recovered;
- (c) **Corporate Income Tax (20%-30%)—All** holders of a mining lease shall be liable to the payment of a corporate income tax on the net profits or taxable income earned from the mining activities. This tax will be set at 30% of Taxable Income if annual turnover is greater than 1,000,000 naira, and 20% of Taxable income if Annual turnover is less than 1,000,000 naira. Taxable income or net profit is the revenue remaining after the deduction of Royalty and all allowable recovery costs.
- (d) **Zero Value Added Tax (VAT = Zero)**
- (e) **Exemption from Custom Duties** on all equipment and capital items agreed to be required for the mining operations;
- (f) Artisanal miners are **exempted from Corporate income Tax** BUT must pay the local taxes in the area of activities.

- (g) **Full currency conversion and Full Repatriation** or remittances of Profits and dividends to allow investor service its (external) loans on the mining activities.
- (h) **Capital Gains Tax**—this is set at 10% of Investor's net profit greater than 200 million naira.

The proposed Fiscal Policy is considered simple and clear with minimal discretionary judgment or input from other Governmental agencies, with the exception of the Ministry of Finance and the Federal Inland Revenue Services.

In light of the generous incentives and deductions already included in the determination of the overall Contractor Take, a tax holiday is not recommended. While investors would like it, it is often not expected. Furthermore, the deductions and permission to carry any losses forward until fully paid implicitly implies an allowed tax holiday. In this regard it is recommended that Section 132 (2) of the Mineral Act be deleted. Furthermore, it is recommended that exemptions from payment of Royalty should not be permitted, and hence, Section 134 (b) of the new Mineral Act should also be deleted.

Below is an example of a hypothetical Tax Income Statement of an investor under the proposed Fiscal Regime and attached as Annex 1 is a comparison **Score Card** for

benchmarking the New Mineral Act and Fiscal Regime with the expectation of the investors

**Hypothetical Tax Income Statement of an Investor**

<b>Item</b>	<b>Naira ₦</b>	<b>Government Take</b>	<b>Investor's Take</b>
Net Smelter Return	100		
Royalty @ 3%	(3)	3	
Gross Income (after Royalty)	97		
Allowable Costs (Cost Recovery)	(47)		47
Depreciation	(20)		20
Taxable Income	30		
(Corporate) Profits Tax @ 30%	(9)	9	
Net Profit	21		
Capital Gain Tax @ 10%	(2.1)	2.1	
Distribution to Share Holders	18.9		18.9
<b>Total Cash Flow</b>		<b>14.1</b>	<b>38.9</b>

Note that the actual return to the Investor is 18.9 naira. However for Cash Flow analysis, the cash flow for the investor for this year is 38.9 naira, which is the sum of its net return

(18.9) and depreciation (20) which was deducted only for the purpose of calculating tax.

**Table 1: Score Card for Benchmarking the New Mineral Act  
With International Practices and Investors Expectations.**

<b>Criteria</b>	<b>Requirements</b>	<b>Score</b>	<b>Comments</b>
<b>Geological</b>	Abundance of Mineral Resources	High	Attractive for exploration
	Geographical Distribution of Minerals	High	In all States of country
	Geological Potential of Minerals	High	Good
	Availability of Geoscientific information	Low	To be improved
	Historical Production	Low	Better Recording
	Quality of geological assessment Techniques	Low	Need improvement
	Level of Reserves	Not Clear	Not Documented
<b>Political</b>	Long term National Stability	Yes	Comparable to other countries
	Regime Stability	High	New Institutions being created to independently monitor and manage

			activities
	Consistency and Constancy of Mineral policy	High	New modern Mineral Act in line with Industry standard
	Internal Security	Medium	To be Improved
	Hostile Borders	None	Good Relationship
	Availability of Foreign Investment Insurance	Low	Institution to provide mining insurance to be established as part of reform process
	Form of Government	Democratic	Fragile
<b>Marketing Infrastructure</b>	Geographical Location	West Africa	Member of ECOWAS, a regional economic group
	Availability of Internal Markets	Yes	Market centers to be created and Privatized
	Transportation Infrastructure	Yes	Need Improvement
	Export/Import Policies	Good	Well regulated

	Regional Trade Agreements	N/A	Could be established
	Demand/ Price Forecast	Yes	There are established local unit prices for all minerals in line with international prices
<b>Regulatory Requirements</b>	Workable Mineral Legislation	Yes	New Mineral Act
	Stability of exploration /mining terms	Stable	To be independently administer by a Mining Cadastre
	Mineral Ownership	State	As per constitution
	Access to Land	Yes	Guaranteed
	Security of Tenure	Yes	Guaranteed in the Act
	Quality of Mineral titles system	High	New Cadastre System
	Right to Transfer Ownership of Title	Yes	To qualified Applicants
	Size of Exploration Blocks	Large	> 1000 square kilometers

	Dispute Resolution	Yes	International Arbitration
	Excessive bureaucratic Intervention	No	Less Discretionary
	Procedural efficiency and Clarity	Clear and Transparent	Further described in New Regulations
<b>Fiscal</b>	Tax method and level of tax levies	Industry standard	Royalty/Tax system- promotes revenue stability
	Level of Royalty	1% -3%	Compared to industry standard of 0-5%, the Royalty is relatively low and attractive
	Availability of Tax holidays	No	Loss Carried forward
	Accelerated Depreciation	Yes	100% on capital investment in year incurred
	Deduction of Exploration /other costs	Yes	100% Cost Recovery allowed in year

			incurred
	Remittance of Profits and dividends	Yes	100% allowed
	Corporate Tax	Low at 20% -30% of Net profit	Industry standard is 15%-35% of Taxable Income
	Currency conversion	Yes	On total profit
	Exemption from Custom duties	Yes	On agreed list of Mining equipment
	Capital Gains Tax	Yes @ 10%	Industry Standard is 5-15%
<b>Environmental</b>	Requirements for environmental Protection	Industry Standard	Impact Assessment Required for Mining leases.
	Establishment of Rehabilitation Fund	Required	Deductible as Cost before Tax
	Existence of Anti-Mining Groups	Some	Mainly NGOs and high local interest.
<b>Operational</b>	Locals equity Ownership	<25% Required	Company with Majority Ownership

	Company has management Control	Yes	Govt. Owner and Regulator but not Operator
	Availability of local geotechnical services	Some	For some activities
	Constraints on use of expatriate staff	None	Investors should endeavor to use Local Staff where qualified
	Level of Government Corruption	Low	Not encouraged
<b>Profit</b>	Measures of Profitability	Profit after tax belongs to company	Based on total cost recovery.
<b>Others</b>	Prior company experience in country	Not required but useful	Simple Qualification
	Specialized Company expertise	Not Mandated	Expertise in Geology, Mining, Helpful
	Helpfulness of government agencies ( Geological Survey, Department of Mines)	Highly Accessible	For data and conflict resolution, etc.

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