

NIGERIA

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Nigeria is Africa's most populous country, with over 137 million inhabitants and a 2003 GDP (according to the IFC) of US\$58.4 billion. It is also a country that continues to display the distinctive characteristics of a 'dual economy' – a modern sector heavily dependent on oil earnings superimposed on a typical African traditional agricultural and trading economy.

In 2003, Nigeria was ranked thirteenth amongst the world's largest oil producers (including OPEC and non-OPEC countries). It contributed 3% of global production and was the most prolific oil producer in Sub-Saharan Africa. The national economy is largely dependent on the oil sector: it provides 20% of GDP, 95% of foreign exchange earnings, and about 65% of budgetary revenue. Current estimates of Nigeria's proven oil reserves range from 25 billion barrels (*Oil & Gas Journal*) to 35.2 billion bbl (OPEC). The majority of these oil reserves are found in relatively simple geological structures along the country's coastal Niger River Delta but newer reserves have been discovered in deeper waters offshore in the Gulf of Guinea, with the majority of the oil lying in about 250 small fields (ie, less than 50 million bbl each).

In 2003, crude oil production averaged 2.1 million bbl/d although in June 2004, Nigeria's OPEC crude oil production quota was raised to 2.14 million bbl/d (as part of OPEC's two-stage plan to increase production in the face of record-high crude oil prices). Production from joint ventures accounts for nearly all (about 95%) of Nigeria's crude oil production. The largest JV, operated by Shell, produces nearly 50% of Nigeria's crude oil. The State-owned oil firm NNPC has a 55% interest in the Shell JV. NNPC also has 60% stakes in JVs with ExxonMobil (US), ChevronTexaco (US), ConocoPhillips (US), ENI SpA (Italy) and Total SA (France). Nigeria also contains an estimated 124,000 billion cubic feet of proven natural gas reserves, mainly in onshore fields and the swampy areas of the Delta. As a consequence of the lack of a gas infrastructure, 75% of associated gas is flared and 12% re-injected. Nigeria has actually set a goal of zero flare by 2010 and is trying to provide incentives for the production and use of gas.

In April 2003, General Obasanjo was re-elected as President (with 61% of the vote) and under his leadership the country has re-focused attention on mining after realising that the investment environment for solid minerals is not domestically or internationally attractive. Nigeria has been serious about developing its solid mineral resources for some time, an internal analysis for the revitalisation of mining sector having been completed and endorsed at the beginning of the 1990s. This led to a number of important actions being taken, beginning in 1995 with the creation of the Ministry of Solid Minerals Development (MSMD) currently under the leadership of the Hon Minister

Elder Odion M Ugbesia. Since its inception, the MSMD has recorded a number of important and positive reform initiatives including the creation of a solid minerals resources committee in all states and the inauguration of a presidential committee on 'Accelerated Development of Nigeria's Solid Mineral Potential' in 2002. This committee has been set the task of formulating a seven-year action plan for the development of the sector. These commendable efforts aim to establish the solid minerals sector as a major element in diversifying the nation's economic base by providing an enabling environment through improved infrastructure and attractive incentives for private sector-led investment, and at withdrawing the state from the entrepreneurial role it has tried to take in the past.

Most recently, in 2004, the MSMD also initiated some of the key procedures to apply for a World Bank (International Development Association - IDA) loan to fund a mining sector support project entitled: 'Sustainable Management of Minerals Resources Project (SMMRP)'. According to the MSMD the main objectives of the SMMRP will be to:

- a) increase the government's long-term institutional and technical capacity to manage Nigeria's mineral resources in a sustainable way; and
- b) establish a basis for poverty reduction and rural economic renewal in selected areas of the country via the development of non-farm income generating opportunities through small-scale and artisanal mining (ASM).

If the SMMRP receives World Bank approval, in late 2004, it will help local economic development in ASM areas, legal and fiscal reform, institutional capacity building, private sector investment, mining cadastre development, environmental and social management, restructuring of mining state-owned enterprises and a strengthening of the geological infrastructure.

According to the Geological Survey, Nigeria's solid mineral resources include a wide range of commodities widely distributed in almost all the 37 states of the Federation. Currently, about 33 solid mineral commodities occurring in about 450 locations nationwide have been identified. However, the available documentation on these deposits, and on the solid minerals sector of Nigeria in general, highlights one alarming feature – the lack of up to date and accurate information on the geology and mineral resource potential of the country.

Although geological survey work has been undertaken, results have yet to be published, and much of the current information dates from the 1970s, as well as some from the colonial era. Estimates of the size of the reserves are probably only as accurate as the technology at the time of survey allowed. The government is fully aware of this lack of geological data and infrastructure and aims to establish new regional potential targets via a comprehensive geological mapping exercise coupled with a thorough mineral resource assessment of the country.

Through the Geological Survey it is also the intention to establish a comprehensive database management facility so that prospective investors

can have ready access to accurate geological and technical information. In fact, many knowledgeable geologists claim that there are extensive opportunities throughout Nigeria for other non-typical deposits based on new conceptual geological models.

In the past there was little structure to Nigeria's mining sector, with constant allocations and revocations of mining licences made through the discretionary power of the Minister. Thankfully this situation has changed with the enactment of the 1999 Mineral & Mining Decree (No. 34). Indeed, the general consensus amongst most legal and fiscal experts is that this decree is reasonably comprehensive and forward looking and in most parts conforms to international standards for developing countries seeking private-sector investment in mining, with issues like security of tenure being adequately addressed. In 2002, the MSMD also took another encouraging and practical step by revoking almost all of the 1,500 or so dormant and redundant minerals licences, leading to a freeing up of previously inaccessible areas. The government has also realised that there is a need to formulate a reliable and computerised mining cadastre and that the Public Mining Institutions (PMIs) need further restructuring, to focus more clearly on policy, mineral rights administration and regulations, geoscientific databases and neutral promotion of the Nigerian mineral sector.

Current mine production in Nigeria is very limited (with mining contributing just 1% to the country's GDP) and appears to be reduced to two barely operational underground coal mines, one open-pit coal mine, and numerous small and artisanal operations producing construction and dimension stone, marble, baryte, clays, gypsum, gemstones, rock salt, limestone, gold, galena, coltan and alluvial tin. In the past, virtually all of the larger operations were either 100% state-owned, through Nigerian Coal Corp (NCC) or Nigerian Mining Corp (NMC), or subsidiaries of NMC. Lack of investment and bad management practices meant that these operations were being inefficiently managed, resulting in the closure of many operations.

However, through the government's privatisation programme (Bureau of Public Enterprise), investors are being sought to restart around 15 of these mining ventures. One of the key privatisation targets is the coal sector. Indeed, with a coal resource estimated at around 2,500 Mt, coupled with the government's recent desire to diversify the nation's electricity generation capacity by reverting to coal for at least 1,000 MW of the total demand, the old NCC sites could prove a very attractive investment target. In fact, some of the most promising coal deposits at Mnyeama, Okpara and Owupka have already attracted the interest from the South African group LSC Consortium and the Polish company Kopex. Likewise, the much promoted 47,000 Mbbbl of bituminous sand deposits in Ogun and Edo states have attracted the attention of companies such as Nisands Ltd of Canada and the Nigerian consortium Beacon Ltd.

Since the 2002 licence revocation, there have only been a handful or pioneering private sector juniors undertaking exploration and some exploitation. Most of these companies are mainly focused on gold and

tantalite and include Bakuwa Mining, Transafric TS, Greenwaters Solid Minerals, Kulfana Mining, Columbia River Resources, Quilos Mining (Birnin, Gwari & Nassarawa), Coronation International, Hansa AG (Iperindo) and Tropical Mines Ltd.

It is important to mention the artisanal and small-scale mining (ASM) sector in Nigeria as this sector is in dire need of attention and assistance. At present, illegal ASM constitutes over 90% of the nation's mining activities and there are probably many thousands of unregistered miners exploiting a variety of minerals including gold, tantalite/columbite, tin, baryte, galena/sphalerite, gypsum, kaolin, salt, feldspar and gemstone-bearing pegmatites in particular. As already stated, one of the key priorities of the proposed SMMRP is to help develop this large and informal sector through a variety of initiatives that should result in rural poverty alleviation, economic development, decreased mineral imports and also added value to specific mineral commodities within Nigeria.