



SOLID MINERALS AND MINING

INTRODUCTION

The solid minerals and mining sector in Nigeria contributed a paltry 0.5% to the Gross Domestic Product (GDP) in 2018, with annual production averaging 40 million metric tons valued at about 34 billion naira (\$95 million US dollars). The solid minerals with the largest production are industrial rocks; limestone, granite, laterite, sand, shale and clay that constitute over 95% of production by tonnage and 90% by value.

Oyo State is blessed with prominent minerals and endowed with a wide range of igneous and metamorphic group of minerals, namely Iron ore, tantalite, columbite, cassiterite, bismuth, gemstones, gold, marble, red clay, sand, gravel, granite, syenite, kaolin and talc. Oyo State has the largest Marble/Dolomite deposits in Nigeria and comes second in its Granite reserves. In the same vein, it also has the 2nd largest Gemstone concentration in Nigeria and almost all gemstones that have been described can be found in Oyo State. The justification for investing in this sector profit potential in this sector in Oyo state knows no bounds.

MARKET OPPORTUNITIES

Indigenous pharmaceutical, cosmetics, paints, manufacturing and toilet ware production sectors are in constant demand of some of the solid minerals by products such as Talc, Marble dust, Feldspar and Kaolin. Despite the local demand, a significant quantity of these solid minerals are exported out of the country for further downstream processing. Informal trade in the gemstone industry occurs and most of the products are exported for further processing and value addition. As the major market for granite in the South West of Nigeria, most of the granite being

used in Southern Nigeria are mined from Oyo State. As a result of the initial reconnaissance survey and prospecting in Nigeria, Oyo State emerged as one of the most favorable destinations for mineral resources development which include the following: granite, red clay, tantalite, columbite, kaolin, marble etc. The State has planned to significantly leverage the extensive solid mineral potentials for socio economic development and is also currently in the processing of gemstones in the State.

NATURAL ENDOWMENTS

Broadly speaking Oyo State, currently ranks 3rd in terms of solid minerals production in Nigeria with a production output worth about \$3,8 million per annum. However, the potentials for the solid minerals sector are yet to be fully explored. Current exploitation is focused on largely marble thus leaving significant potential for the exploitation of other available mineral resources within the State.

Oyo State has the largest by land mass deposit of Marble/Dolomite in Nigeria, and this is found at the Igbeti Marble Deposit Site. The exact quantities are yet to be determined, as this would require detailed pre-exploratory studies to determine the reserve quantities. However, studies have shown that the marble forms an elongate body that stretches for about 120km in the N-S direction and varies in thickness from less than 0.5km in the Igbeti area and the northern part to about 1 km south of Alagutan in metre thickness of the marble body.

It is on record to date that some of the world’s most impressive gemstones was found in Oyo state. The site of the famous rubellite tourmaline (red-pink) and spessartite garnet finds of the late 1990’s was Oyo State. The Ofiki and Saki sites in Oyo State are still producing tourmaline and garnet in a range of colors.

Oyo State is naturally endowed with Pyraiba and Emerald and recent explorations has classified Oyo State as a Gold Endowed State. The state is endowed with soil-based resources which include granite chips, red clay, sand and gravel that have high potentials in the construction industry given the increase demands for infrastructure (such as roads, bridges, housing) and related activities both within the state and in neighboring States. There are assumptions that the granite reserves in Oyo State are up to 2 billion tonnes..

SOLID MINERALS FOUND IN OYO AND THEIR GROUP CLASSIFICATIONS

INDUSTRIAL MINERAL	GEM STONE	DIMENSIONAL STONE
<p>TANTALITES, TIN, CASSITERITES, COLUMBITE, ILLUMINITES, KYANITE, KAOLINE,</p>	<p>PYRAIBA, AGATE, BISMULT, AQUA, MARINE, TOURMALINE, GOLD, SAPPAHIRE</p>	<p>GRANITE, MARBLES/ DINOMITE, FELSPAR, QUARTZ, TALC</p>

SOLID MINERALS DEPOSITS SHOWING INDUSTRIAL APPLICATIONS AND KEY FOREIGN DEMAND

Mineral Type	Industrial linkage	Key Foreign Demand Market
Granite	Construction and Furniture	United State, UK
Marble/Dolomite	Cement works, Construction	India, China, France, Iraq
Red Clay	Cosmetic, Construction	India, Australia, Iraq
Tantalite	Electronic	Brazil, UK, Columbia
Tourmaline	Jewelry	US, UK, China, Brazil, Canada
Talc	Cosmetics	China, Algeria, India
Gold	Jewelry, Power	India, China, Saudi Arabia
Aquamarine	Jewelry	US, UK, Australia, China
Feldspar	Manufacturing, Construction	India, China, Philippines
Quartz	Manufacturing	India, US, UK, Australia
Bismuth	Manufacturing	China, Australia, UK, Egypt
Agate	Manufacturing	US, China, Hungary, India, Thailand
Cassiterite	Manufacturing	India, Russia, UK
Kaolin	Manufacturing, Construction	China, Malaysia

CAPACITY

There is a huge need for highly skilled technicians and specialists across various subsectors of mining and solid minerals. Due to the manual system of mining currently employed, the skills base in the industry can be best described as crude with non-skilled labour being employed mainly. Opportunities exist for technical capacity development.

- Current Mining Operations in Oyo State

- Several mining sites for Gemstones.
- Currently 20 Granite Quarries are operational in the State
- 2 Nos. Granite cutting Sites
- 3 nos. Clay Bricks Quarrying companies
- Several Marble / Dolomite mining sites.

INVESTMENT OPPORTUNITIES

- The State has floated a company named the Pacesetter Mining Company which will serve as a vehicle for partnering with foreign and local investors by way of a joint venture to explore the solid mineral deposits existing in commercially viable quantities.
- Investment opportunities exist for mining exploration companies to partner with the State by providing bankable data of the reserves of all our un-explored but identified solid mineral deposit sites.
- **Value Addition to Mined Gemstone:** Establishment of a value addition center that includes faceting and lapidary that will improve and enhance the quality and value of the stone.
- **Gemstone Buying Centre:** The proposed gemstone buying center will be a one stop shop market for buyers, sellers and consumers. The Mineral Gemstone Buying Centre is open to several investors that will ensure that the needed revenue is obtained.

The State is willing to establish Public Private Partnership (PPP) arrangements with companies in the business of mineral exploration and mining. The State is in possession of several mining licenses and is open to partnership with investors who have the capacity and capability to mine.

