

AN EVALUATION OF THE 1971 MINERAL RESOURCES POLICY OF NIGERIA

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ABSTRACT: *The development of mineral resources will not only promote local industries, it will also achieve through foreign trade in minerals and metals, a favourable balance of payment position for the country. For this to be achieved, a new and virile policy should be put in place in order to guide the exploration, exploitation and evaluation of these mineral resources. The 1971 mineral resource policy, which is the last, is stale and needs to be reviewed. The policy is found to contain many defects. It was observed that employment generation, increase in private sector participation in the mineral resource development, encouraging technology transfer and development, attracting foreign exchange capital etc were not adequately taken care of. Also, strategies for effective implementation, incentives for investors and guidelines for participation were also not taken care of. The paper, based on the assessment of the 1971 policy, recommends measures such as provision of greater employment opportunity, increased export and foreign exchange earning, improving technological skills, encouraging development of infrastructural facilities like electricity, good access roads and water, (especially for rural areas) as well as effective guidelines aimed at fashioning out a new policy for mineral resources development in Nigeria.*

INTRODUCTION:

Nigeria is one of the leading world producers of mineral oil, tin, columbite and hafnium-bearing zircon as well as a producer of monazite, wolfram and gold (Federal Republic of Nigeria, 1971). Also, there are deposits of many of the basic materials exploited and used by industry such as coal for fuel, limestone for cement, marble for flooring purposes and clay for pottery manufacture. In fact, according to the Honourable Minister of Solid Mineral Development, Nigeria has thirty three (33) identified minerals with high economic potentials (Ali, 1995).

The development of mineral resources will not only promote local industries, it will also achieve, through foreign trade in minerals and metals, a favourable balance of payment position for the country. As a result of this, there is a need for a close co-operation between Government and the private sector organisations in order to jointly pursue the growth of a healthy mining industry for national development.

In addition, Nigeria needs a new and virile policy to guide the exploitation and evaluation of these mineral resources. The importance of policy making for national

development should not be overlooked. Specifically, there is need for a well-articulated, realistically formulated policy on mineral resource development for Nigeria to be able to utilize the mineral resources for national development. Once the necessary laws, strategies or guidelines needed to give effect to the policy have been put in place, the next task is policy implementation (Egonmwan, 1991). The level of mineral resources development in Nigeria is still not encouraging, (Federal Republic of Nigeria, 1971). This could be attributed to poor policy formulation, poor implementation strategies and lack of effective monitoring.

Nigeria is a dynamic society and as such our policies should be dynamic. For effective national development, policies should be subjected to constant review. There is therefore an urgent need to review the already stale 1971 policy on mineral resources development in order to have a document that will encourage investors to involve themselves in the national development process.

This paper is aware that a Committee was set up and inaugurated in 1995 by the Minister of Solid Minerals Development to formulate a new national policy on solid minerals development for the country. But, since the new policy is not yet

out. it is assumed that the work is still going on. Hence the information contained in this paper is a modest contribution of the writer towards the production of the long overdue new policy.

The paper is divided into five sections. The first gives a broad introduction to the focus of the paper and its mission. In the second part, we examine the brief history of mineral resources in Nigeria. Mineral resources and national development is the main focus of section three. The fourth section centers on the critical assessment of the 1971 policy on mineral resources development. Section five of the paper contains some recommendations and conclusions.

BRIEF HISTORY OF MINERAL RESOURCES

The mineral survey in Nigeria started in the southern part in 1903 (Federal Republic of Nigeria, 1987). First to be discovered were lignite in Asaba, Ore of lead, tinstone and columbite in streams in the Uwet district. Limestone was also discovered. In 1905-96, a bitumen deposit in the swampy country east of Lagos was discovered. This was followed by the discovery of lead and zinc ores of Abakaliki in the present Ebonyi State. Coals were discovered at Udi and lignites near Nnewi.

In the Northern Protectorate, the Mineral Survey began field work in 1904 (F.R.N., 1987). Tin deposits were discovered on the Plateau. By 1905-06, some iron ores were discovered in parts of the present Kogi and Kwara States. Some marble deposits were also found at Jakura, west of Lokoja. The Mineral Surveys of Northern Nigeria and Southern Nigeria were disbanded in 1909 and 1913 respectively (Federal Republic of Nigeria, 1987). From 1922-24, the coal deposit in Enugu was investigated. This continued for several years. On the other hand, phosphate rock was found in the present Ogun State.

In 1946, gold was discovered around Ilesha though the occurrences of gold were shown to be too small for large-scale operations (Jacobson and Webb, 1946).

Apart from deposits of coal, lignite, tin, columbite and gold, numerous occurrences of other economic rocks and minerals were examined after the war. Large deposits of iron-stone were discovered at Enugu and Agbaja near Lokoja in Kogi State. Iron-ore deposits were also discovered and investigated at Itakpe Hill in Kogi State and Muro Hills in Nassarawa State. Limestone was also discovered at Nkalagu, hence the establishment of cement factory there in about 1957.

The activities of the Geological Survey and Mines Departments were adversely affected by the Nigerian crisis of 1966-1970, during which time little was achieved nation-wide because the atmosphere was not conducive to field work.

Oil companies made important contributions to the exploration of oil in Nigeria. For instance, Shell Petroleum Development Company of Nigeria Limited embarked on the exploration of oil in the country in 1937. Regional exploration of phosphate in Sokoto State was commenced in 1980. The results so far obtained were promising enough to justify exploration drilling which was still in progress by 1987 (Federal Republic of Nigeria, 1987).

More exploration and discoveries of mineral resources deposits in Nigeria continue. Nigeria Governments have become aware of the importance of mineral resources in national development. The present government has provided funds and facilities, though not adequate, for the development of mineral resources in Nigeria.

Good and effective policy is therefore needed to direct the process of exploration, exploitation and utilization of the mineral resources for national development.

MINERAL RESOURCES AND NATIONAL DEVELOPMENT

In the preceding section, it was observed that the discovery of mineral resources in Nigeria dated back to 1903. Till the present day, a reasonable number of mineral resources have been explored in different parts of Nigeria. These minerals are mainly used as raw materials for industrial production for national development. Infact, with increasing world population and consumption patterns and demands for better living, world requirement of minerals and mineral products will continue to rise (Ogezi, 1985).

This section examines the importance of mineral resources to national development. Industrial development contributes to national development. Since most of these mineral resources serve as raw materials for industrial production, their availability and exploitation will contribute to national development.

Mineral resources can be classified into: industrial minerals and rocks, metallic ores, gemstones, energy/fuel minerals (RMRDC, 1990). Past efforts in the exploration and exploitation of Nigerian mineral resources have been concentrated on fuels and some metals like gold, zinc, tin and iron. All non-petroleum resources were relegated to the background by the oil boom of the 1970s.

Local exploration of industrial minerals was largely neglected since there was so much foreign exchange to import them. Even sand and laterite which are commonly available in Nigeria were imported from abroad (R.M.R.D.C, 1990). Subsequently, the down-turn in the price of crude oil, which was the primary foreign exchange earner, made it impossible to import many products into Nigeria. The need to look inward for our industrial raw materials made it imperative to focus attention on the neglected exploration and exploitation of the various industrial minerals that abound in Nigeria.

Minerals are very important in modern industrialised economy and they therefore constitute important ingredients for industrialisation. However, the great diversity and numerous peculiarities of these minerals make their classification challenging. Since the primary interest of this section is in the industrial end-uses and applications of these minerals to industrial production, some minerals and their utilization will be discussed individually.

Minerals like diamond, corundum, silica, chert, flint, quartz, sandstone, limestone, granite etc are commonly used for the production of abrasives (RMRDC, 1989). These natural abrasive materials are used to manufacture several abrasive products like powders for soap, cleaners and polish.

Silica, clays, magnesia, limestone, bauxite, talc etc are mineral resources used in making ceramic products. Various types of clay minerals exist naturally, but those that are of greatest industrial importance include kaolinite (kaolin) montmorillonite (smectite), halloysite, illite etc. Clay materials are used for the manufacture of many products including ceramics (refractories, pottery structural unit), cement catalysts, drugs and other chemicals.

For metallic mineral resources, they are classified into ferrous and non-ferrous ores. Ferrous ores are utilized almost entirely as the primary raw materials for iron and steel production while non-ferrous ores have much wider industrial application. Iron and steel products are basic inputs into the following industrial sectors:-

- (1) Infrastructure and construction
- (2) Manufacture of agricultural and agro-industrial machinery
- (3) Manufacture of transport equipment, especially railways
- (4) Manufacture of machine tools
- (5) Manufacture of mining equipment

- (6) Manufacture of spare parts essential for the functioning of the entire industrial sector.

Aluminium, copper, lead, zinc and tin are the most important non-ferrous metals. Others are gold, columbite, nickle etc. Non-ferrous ores are used in the development of the following:-

- (1) Pyro-metallurgical processes
- (2) Hydro-metallurgical processes
- (3) Mineral leaching.

Marble, emerald, aquamarine, sapphire, amethyst, rock crystal etc are the most common gemstones that are found in Nigeria (RMRDC, 1989). Exploitation of gemstones in Nigeria can generate huge revenue for the government.

In Nigeria, of all these stones, only marble has been utilized to an appreciable extent. Granites, rhyolites syenites and diabases have not been utilized yet over =N=50million naira is currently spent annually on the importation of these stones by the building and construction industries (RMRDC, 1990).

Coal, tar sand, radioactive minerals, petroleum and gas are regarded as energy and fuel minerals. Coal is important to the iron and steel industries. The demand for metallurgical coke for the steel mills at Aladja and Ajaokuta is estimated to be about =N=2 million tonnes a year while the reserves of coal in Enugu, Benue, Kogi and Nassarawa States are estimated at over =N=458 million tonnes (RMRDC, 1990). Coal is processed into a large number of industrially important chemicals. These include graphite, activated carbons, recarburization material in iron and steel making. The lignite deposits of Anambra, Edo and Delta States are suitable for processing into domestic and industrial smokeless fuel. The gaseous by-product from such processing is known to be rich in waxes and can be condensed to obtain valuable tar, pitch and waxes, (RMRDC, 1990).

Petroleum is a very important resources which is abundant in Nigeria. Apart from polypropylene, carbon black and linear alkyl benzene products which are currently being produced by the petro-chemicals industry, there is future potential for the production of polyester chips, polyvinyl chloride (PVC), polyurethane, polystyrene, benzene, etc which have broad applications in agriculture and food processing/preserving industry, chemical and pharmaceuticals, building and general construction industry, manufacture of household goods, textile industry and automobile manufacturing.

The agricultural sector also requires various petro-chemical products. For instance,

PVC irrigation pipes are used for irrigation to bring more land under continuous cultivation. Insecticides and herbicides are derivatives of chlorinated hydrocarbons.

The list of what mineral resources can be used to produce cannot be exhausted. They can be used in all aspects of national development. However, this will not be achieved if there is no virile policy to take care of its exploitation exploration and utilization.

CRITICAL ASSESSMENT OF 1971 POLICY ON MINERAL RESOURCES DEVELOPMENT

In assessing the 1971 mineral resource development policy, the following defects were observed:-

In section 10 of the policy, the policy objectives are few and as such not comprehensive. The few objectives are:-

- a) to supply raw materials for domestic industries.
- b) to meet the country's requirements of mineral substances, e.g. iron and steel products, salt, potash and chemicals.
- c) to provide better and cheaper materials for building and road construction.
- d) to compete effectively for a fair share of world trade in metal and minerals.

The policy did not take into consideration the following objectives:-

- a) Employment generation.
- b) Increase in private sector participation in the mineral resources development.
- c) Encouraging technology transfer and development.
- d) Attracting foreign capital.
- e) Development of infrastructural facilities like good access roads, electricity, water, etc especially in rural areas.
- f) Encouraging industrial growth in the country.

Also, in section 11 of the policy, reference was made to the maintenance of a favourable climate for investment in the mining industry.

The policy was expected to have gone a step

further to explain what "a favourable climate for investment" means. Favourable environment like political stability, security, strict enforcement of necessary laws should be clearly spelt out.

Section 12 of the policy does not contain strategies for achieving the objective of having national research laboratories. The policy objective lost sight of the fact that research work is not done in isolation. Strategies like provision of adequate funds, skilled personnel, research tools, etc are needed for effective research work.

Furthermore, in section 13 of the policy, it was highlighted that "Government's service will include work of exploration which could be undertaken by the Geological Survey and the Mines Division of the Ministry". Again, the policy objective did not provide a strategy for achieving this. A strategy for implementation would have mentioned provision of necessary exploration tools and how the exploration is to be carried out and monitored/assessed. As mentioned earlier, a good policy must be implementable. For a policy to be a virile one, it must have the following characteristics:-

- Strategies for implementation,
- incentives for investors, and
- guidelines for participation.

However, the 1971 policy on mineral resources development does not have any of these.

Strategies are the steps taken to achieve an objective. The policy was expected to have included the following as strategies for effective policy implementation and monitoring:-

- a) Provision of adequate institutional framework, that would ensure policy formulation, review, monitoring and evaluation.
- b) Provision of adequate funding by Government.
- c) Adequate staffing.
- d) Provision of infrastructural facilities - energy, water, good roads for transportation of these mineral resources from the mines.
- e) Provision of mineral resources processing facilities.
- f) Improving of technology and human resources.
- g) Provision of ready market with favourable pricing mechanisms.
- h) Increasing private sector participation.

- i) Resuscitation of abandoned mines.
- j) Harmonising mining policies at Federal, State and Local Government levels.

In order to induce greater support of the mineral resources development objectives, a package of incentives should be contained in the policy. However, the 1971 mineral resources development policy under review, does not contain clearly defined incentives for investors. Incentives like the following, should have been included:-

- a) All mining machinery and spare-parts imported by miners should be duty-free.
- b) Provision of tax reliefs and tax holidays by the government.
- c) Retention of a percentage of export earning in a foreign account towards the payment for special services and spare parts required by the mining industries.
- d) Consistency in the policy/laws must be guaranteed by the government.
- e) Production sharing between the government and the investors should be encouraged.
- f) The government should establish a Mineral Resources Development Bank.
- g) Adequate funding should be provided by the government to the institutional framework.
- h) Mineral-based industries should be encouraged by the government. This will stimulate demand of mineral products as raw materials.

Also omitted in the 1971 policy on mineral resources development is the guideline to investors, though Government later produced a guideline that was not comprehensive. Guidelines are government requirements for establishing business or industries in Nigeria and relevant government insitutions involved in the process. (Federal Republic of Nigeria, 1988). The policy is expected to have contained the following guidelines:-

- 1. Business permit for establishment.
- 2. Approved status to ensure that imported capital can be repatriated.

- 3. Investment guarantee approvals.
- 4. Approval covering pre-investment technical fees agreement.
- 5. Acquisition of environmental pollution control gadgets.

RECOMMENDATIONS

Based on the foregoing assessment of the 1971 mineral resources development policy, and in view of the invaluable contributions that mineral resources development can make to economic, social and industrial development, the paper recommends as follows:-

The objectives of government policy on mineral resources development shall be to achieve an accelerated pace of mineral resources development for national development. They must, while ensuring mineral supply, seek to maintain good control and balance between the need for mineral supply and the greater need to ensure the safe-guarding of the people and the environment from the unavoidable adverse environmental, social and economic impacts of mineral exploration, exploitation and processing. The elements of these objectives shall include:-

- 1. Providing greater employment opportunities for Nigerians particularly in the rural areas where the minerals are found. The solid minerals sector can very easily be one of the largest employment sector of the economy.
- 2. Increased export and use in domestic industries from which foreign exchange and internal revenue will be generated.
- 3. Improving technological skills. For the nation to be self-sufficient in mineral resources production, the average level of technological competence of Nigerian population needs to be significantly raised. The quality and availability of technical education, the content and level of mineral resources research institutes will contribute to the achievement of this vital objectives.
- 4. Increase local content of mineral resources output. This will be achieved mainly through increased use of mineral resources as local raw materials for industrial production and further backward integration by existing industries. As the local content of industrial output increases, this will affect the general level of economic activity.

5. Encouraging development of infrastructural facilities like electricity, good access roads, water etc especially in rural areas where some of these mineral resources are located.
6. Increase private investors participation:- The realization of government objective of accelerated mineral resources development hinges critically on increased private investors participation. Dwindling government financial resources, ever-increasing social-economic responsibilities, rapidly increasing population have all combined to make increased private investors participation an important policy objective.

6). Extension Services:-

Professional advice, assistance and support should be made available to small, medium and other operators in the mining industry in order to ensure efficient exploitation and maximum mineral recovery to the benefit of the nation.

INCENTIVES: - The following incentives are recommended to attract and retain investors in the mining industry.

- 1) Government should establish a Mineral Resources Development Bank. The establishment of this financial institution should facilitate the provision of 'soft loans' scheme with long term repayment period and low interest rates to the mine operators.
- 2) Government should encourage and facilitate the establishment of mineral-based industries to stimulate demand of mineral products.
- 3) Government should evolve a system of production sharing between it and the investors.
- 4) Long term consistency in the regulations/laws that control investment in the minerals industry, should be guaranteed by the government. This is to provide the much desired investment climate required to attract foreign capital.
- 5) All mining machinery and spare-parts imported by miners should be duty free.
- 6) Government should provide tax holidays especially to mining companies with pioneering status.
- 7) Investors should be encouraged to retain a percentage of export earnings in their foreign bank accounts towards the payment for special services and spare-parts required by the industry.

STRATEGIES FOR POLICY IMPLEMENTATION:

In pursuit of the central objective of mineral resources development, the following strategies are recommended:-

- 1) Provision of adequate funds for the execution of project. The already existing institutions under the Ministry of Solid Mineral Development and other Ministries should be adequately funded for effective performance.
- 2) Availability of processing facilities: The provision of processing facilities such as custom mills, classifier and concentrators enhance value-added to minerals concerned and lead to offers of higher prices. This trend subsequently encourages increased production.
- 3). Existence of enabling environment:-
For the solid minerals industry to perform well and contribute substantially to the nation's economy, there is need for a political stability, security, long-term policies as well as strict enforcement of the necessary laws. Such an enabling environment will win investors' confidence, encourage foreign participation and attract international assistance.
- 4). Ready market with favourable pricing mechanisms:-
Government should protect mining industry by providing outlets for all minerals that are locally produced. This is particularly important with respect to small and medium scale miners whose cashflow situation can be adversely affected if their products are not sold within a short period of time.
- 5). Increased private sector participation:-
Increased private sector participation in mining should be vigorously pursued and encouraged with favourable equity participation conditions.

Guidelines to Investors:

The main requirements for participating in mining industry should

include the following:-

- (a) Prospective investors should obtain business permit in order to establish an industry.

- (b) They should also obtain investment guarantee approvals.
- (c) They should secure approved status to ensure that imported capital can be repatriated.
- (d) Investors should also acquire the environmental pollution control equipment.

Mining is peculiar and guided by Minerals Act of 1946 (Laws of Federal Republic of Nigeria, 1990, chapter 226) and Guidelines of 1986.

CONCLUSION:

The importance of a virile policy on the development of mineral resources cannot be over-emphasized. The 1971 policy on mineral resources development is defective and as such was difficult for effective implementation. With the recommendations, based on the above assessment, it is hoped that the new policy being formulated will make for better development of mineral resources and overall national development.

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