

**REPOSITIONING THE OIL AND GAS INDUSTRY**  
**FOR ECONOMIC DEVELOPMENT J.T. OKUBOTE**

I am delighted to be part of this Annual Conference today and to share my views with you on the "***Repositioning the Oil and Gas Industry for Economic Development***". This Conference on "***Resource Endowment, Growth and Macroeconomic Management in Nigeria***" is being organized at a critical time in our socio-economic development history when we dispassionately need to decide on how best to position the oil and gas industry for sustainable economic development. After more than four decades of exploration and development activities, it is painful to observe that the per capita income in Nigeria is one of the lowest in Africa. Given the vast resource endowments in terms of natural resources and even human resources, Nigeria is naturally expected to be "the primus interferes" in Africa. One feels that the missing link is the absence of shared vision and ineffective and inefficient management of resources.

2. Let me therefore, commend the wisdom and efforts of the Management of Central Bank of Nigeria (CBN), Research Department in revisiting this contemporary topic particularly at this time of our nationhood as we look forward to the second half of this nascent democracy. I have been asked to speak on "***Repositioning the Oil and Gas Industry for Economic***

***Development***". This topic presupposes that the industry is weak, performing sub-optimally and therefore requires some re-engineering and refocusing. A quick assessment of the industry's performance will provide answers on how far the industry has performed. In this paper, I will examine some critical issues and the future challenges facing the industry.

3. **Oil and Gas Industry and the Nigerian Economy**

Oil and gas industry arguably has the most pervasive influence on the world economic scene today and even more so in Nigeria where the commodity constitutes the life wire of her economy. It has been the pivot of the economy for quite some time now and will in foreseeable future maintain the dominant role. Since the energy crisis of 1973/74 arising from the Arab oil embargo, the sector has been the major contributor to our foreign exchange earnings, accounting for over 90%, constitutes about 28% of the Gross Domestic Product (GDP) and accounts for about 85% of the Federal Government's collectible revenue. Furthermore, petroleum accounts for over 78% of our national commercial energy consumption and has been the engine of growth, fuelling the entire economy. The development, witnessed over the years in education, health, transportation and infrastructural development have been primarily financed by the sector. The oil and gas industry is therefore, critical to

the national economy while its management is of keen interest to the Government

4. However, it is regrettable that after 40 years of oil and gas exploitation in Nigeria, the country has not been able to effectively develop other resources to complement the role oil and gas plays in the economy. Agriculture which used to be the mainstay of the economy at independence, has since been neglected while social and economic infrastructure have been unprofessionally maintained. The inability to diversify and the dearth of productive capacities have been the bane of our economy. The near total reliance on crude oil has led to utter neglect of other sectors. Related to the dearth of productive capacities is the near absence of technological capabilities leading to the low local value added in the industry. To this extent, the industry is highly dominated by multinationals.
  
5. Experience has also shown that the nation cannot continue to rely on a single resource for its economic development. The unpredictable and cyclical nature of the crude oil market with its attendant adverse impact on the country's economic and socio-political well-being attest to the danger of over reliance on crude oil. Therefore, the challenge facing us in this sector, as a nation, is how to develop appropriate strategies for judicious and efficient harnessing of the potentials of Nigeria's

hydrocarbon resources for stimulating the entire economy and for sustainable development.

In many ways, NNPC, in its various roles as the manager of government investments in the sector and operator of its own ventures generally superintend over the industry acting both as driver and motivator in an industry that has become highly sophisticated. The policies of Government and the strategic focus of the NNPC and the attendant activities over the years have dictated the pace of development and shaped the Nigerian oil and gas industry.

## 6 **Structure and Development of the Oil and gas Industry in Nigeria**

At the onset, the Government was merely a fiscal and regulatory agent in the oil and gas industry. It was not until 1971 when it established the Nigerian National Oil Corporation, NNOC, that the Government started to take active participation in the industry by acquiring participating interests in the operations of the multinationals in response to the policy of OPEC as per its Resolution XVI of 1968 regarding the control of each member country's oil and gas industry. The acquisition started in 1971 with 33 1/3% in Agip. The same year, Government acquired 35% participating interest in Elf

concessions and by 1974, the acquisition has covered all the multinational operating companies with the percentage interest increased to 60%. These arrangements marked the beginning of the present Joint Venture Arrangement (JVA) between Government and the major oil producing companies which subsists till today. There are seven of such JVs today (see Table 1 on current equity participating interest).

Prior to this, NNOC had played a key role in the arrangement with Ashland for the operation of two blocks under a Production Sharing Contract (PSC) in Nigeria signed in 1973. This marked the beginning of another type of relationship between the Government and the Operating Companies in the country in addition to the JVs which had been in existence for over a decade.

7. By mid-1970s, the multiple role of the Corporation as an agent of Government in the management of its assets, as well as, a direct operator of its own venture was established. Apart from managing the assets of the Government in the JVs, the Corporation was also responsible for marketing Government equity crude while ensuring compliance with OPEC quota limitation. This multiple role of the Corporation was expanded as the industry became more complex and new entrants, as well as, novel relationships were entered into. In 1974, NNPC commenced active exploration and drilled its first exploratory well offshore in the Niger Delta. This well was in the deepest water at the time and within one year, the Corporation had drilled as many as six wells in the same terrain.
  
8. In 1977, NNOC was merged with the Ministry of Petroleum Resources to form the Nigerian National Petroleum Corporation (NNPC), which effectively combined the operational and regulatory arms of the industry in one body apparently in an attempt to inject professionalism into the regulatory sector.

This also led to an expansion of the Corporation's sphere of activities especially in the downstream sector where the dearth of refining capacity became very apparent, as the country's

product consumption level had outgrown supply. An elaborate downstream development programme was therefore drawn up and pursued with vigour. By 1978, NNPC commissioned its first refinery in Warri with an installed capacity of 100,000 barrels per day. Also in 1978, the Corporation ventured into the Oil Services Industry with the establishment of a Seismic Data Acquisition outfit, Party X, with capacity for onshore operations.

9. In 1979, NNPC commissioned the first and second phases of its national product pipeline and depot network while acquiring interest in some of the major product marketing companies in the country. The product distribution network now consists of 22 storage depots and over 5,000 kilometers of pipeline. By 1980, NNPC had established another refinery in Kaduna to which a Lube Plant was added in 1983 - See Figures 1 and 2 for the storage depots.





10. Within this period the Corporation was also very active in the upstream. Its exploration activities had been extended to the onshore areas of the Delta leading to the discovery of several fields, some of which were later allocated to some indigenous operators about a decade later. In 1982 the Corporation established yet another Seismic Party (Party Y) and the same

year commissioned its Seismic Data Processing Centre in Benin-city, with CGG of France as a partner. About the same time, the Corporation's exploration efforts were extended to the inland basins of Chad and Benue Trough in the northeastern part of the country where the Corporation played a unique "wildcatting" role. This initiative was followed about a decade later when some of the multinationals took blocks in these inland basins and have more or less corroborated the findings of NNPC.

11. Sequel to the dwindling fortune of crude oil in the world market in the early 80's, it became necessary to take stock and update the nation's crude oil and natural gas reserves for proper planning and conservation. Towards this end, the Data Processing Centre in Benin City was expanded in 1985 to incorporate a National Reserves Evaluation Centre. The following year, NNPC was instrumental to the signing of a Memorandum of Understanding with the Joint Venture partners to ensure continued investment in exploration and production activities in the face of a biting oil glut in return for some guaranteed profit margin.
12. By 1987, the Corporation had grown into a behemoth with a lot of activities and interests. The activities of the Corporation covered the entire spectrum of the industry, having taken up

from inception the enormous responsibilities of managing and operating in all aspects of the industry while providing leadership and pioneering roles in several areas of the Nigerian economy.

13. The rapid expansion however came with attendant management problems and in 1988 NNPC was reorganized along commercial lines, leading to the creation of eleven subsidiaries to manage the different aspects of the Corporation's vast interest and assets. In the same breath, the regulatory arm of the Corporation (Inspectorate Division) was taken to the Ministry and that structure has remained much the same today. The restructuring however afforded the NNPC the opportunity to expand its operations especially in the hitherto largely neglected area of gas investment for which the Nigerian Gas Company (NGC) was created with the objectives of gathering, treating and marketing natural gas in the country. Since establishment, the company has been able to put in place some infrastructure for gas delivery to identified customers. We plan to expand the system into a national gas grid similar to the product pipeline network.
14. The construction of the Escravos Lagos Pipeline (ELP) by the NGC soon after its establishment is probably the most significant contribution by any entity to the domestic gas

industry in Nigeria today. The line, which runs over a distance of about 270 km from Escravos in Delta State to Egbin in Lagos constitute an arterial supply line from which tee-lines have been constructed to supply gas to some industrial estates in the Lagos area and will be the supply pipeline for the proposed West African Gas Pipeline System that will supply gas to Ghana, Republic of Benin and Togo. Today, over 80% of the gas marketed locally in Nigeria goes through the NNPC facilities.

15. In 1989, NNPC established a 150,000bbls/day capacity refinery in Port Harcourt while the old Shell Refinery was de-bottlenecked to 60,000bbls/day along-side those in Warri and Kaduna which were de-bottlenecked from 100,000 each to 125,000 and 110,000 bbl/day respectively thereby bringing the country's total refining capacity to 445,000bbl/day.
16. In 1990, Government licensed the first set of deepwater blocks, which brought a number of new comers, including Statoil, Esso and Amoco, into the Nigerian oil industry. Government through NNPC went into Production Sharing Contracts with seven of these companies including Shell, Statoil/BP Alliance, Agip, Elf, Mobil and Esso. The agreements were signed in 1993. The same round of acreage licensing also saw some

indigenous operators being allocated blocks both in the offshore as well as on-shore.

17. The first Liquefied Natural Gas Plant in which the NNPC is a major equity holder went into operation in the country in October 1999 with the first shipment of LNG after over 2 decades on the drawing board. Since then about 129,000 metric tones of LNG have been produced and 116 cargoes shipped. The success of the Nigerian LNG project has given confidence to both local and international lending institutions and encouraged the shareholders to plough back their earnings in an aggressive expansion programme to take advantage of the emerging opportunities in the market. On a world scale performance level the Nigerian LNG project is one of the best with consistent capacity utilization of over 100%. We have been able to meet all our contractual obligations to our buyers.
  
18. NNPC and its joint venture partners are also involved in a number of Independent Power Plant (IPP) Projects for electricity generation. Apart from providing an avenue to monetize gas, IPPs will add to the power pool of the country and create the much-needed synergy between petroleum and the power sector.

19. In 2000, Government announced a target reserve of 30-billion barrels and producibility of 3 million barrels per day (bpd) by 2003 with the expectation of achieving 40 billion barrels reserve and 4-million bpd producibility by 2010. This is a challenge to the industry and would require innovative strategies and cooperation of all to achieve. Understandably, NNPC will be at the vanguard of realizing these objectives and given the present development programmes of its partners, these targets are achievable.
20. Some ten years after the first set of deep-water blocks were licensed, over thirty wells have been drilled and several discoveries with world-class reserves have been made. This apparently encouraged Government to carry out another round of licensing in Year 2000 in which seven of the eight blocks licensed are located in the deep offshore. NNPC is now in the process of negotiating a Production Sharing Contract with the new awardees.
21. Today, the NNPC is faced with a myriad of problems resulting from the long neglect of its infrastructure, facilities and mismanagement of assets. The new management has succeeded in repositioning the corporation on a path of growth with a commitment to excellence and professionalism. NNPC has been able to instill discipline in the marketing of its equity

crude and has reinstated transparency and accountability in all business transactions. JV cash calls were increased in magnitude and paid regularly and timely. This has given a lot of confidence to our partners and has assured them and the international community of our determination to ensure that the industry continues to lead the economic and industrial development of Nigeria.

22. Ladies and Gentlemen, I have given this detailed history of the evolution of the NNPC and the Nigerian oil and gas industry so as to give a background of where we are coming from and our plans for the further development of the industry. Several challenges face us today as an industry. We are gravitating more into the deep and ultra deep off shore in an effort to achieve a reserve level of 40 billion and 4mbd producibility by 2010. This requires the utilization of efficient and cost effective technologies to minimize cost. Furthermore, we need to develop Nigeria's natural gas resources to be at par with crude oil. Apart from striving to expand its direct operations especially in the upstream area, efforts are being made to monetize our gas and achieve a gas flare out by 2008. In this regard various gas utilization projects such as NGLs, (Natural Gas Liquids), GTL (Gas to Liquids), IPPs (Independent Power Producers), Compressed Natural Gas (CNG), the transnational gas pipeline grid, the West Niger Delta LNG and a host of



others are being planned for execution in the next five years. Most importantly, it has become imperative that we improve on the local content in the industry if we are to survive in the long run. It is a matter of regret that since the birth of the Nigerian Oil and Gas Industry about four decades ago, the local content is less than 5% in an industry that invest billions of dollars annually. The industry must set the pace for technology transfer and actual domestication in the country.

23. Our plan is to grow the Corporation as an integrated oil and gas Company to the likes of Statoil and other National Oil companies who have more or less become multinationals with operations in various parts of the world.
  
24. For the downstream business, the Corporation is striving to ensure optimum capacity utilization of the local refineries and petrochemical plants. This is to ensure uninterrupted availability of petroleum products nationwide. NNPC has repositioned itself to meet this national aspiration. It has therefore introduced efficiency, cost containment, transparency and accountability in all its operations. With the support of the present civilian Government, through additional injection of funds, the long outstanding statutory Turn Around Maintenance (TAM) and the rehabilitation programmes of our refineries are being carried out. For instance, in 2001 the

domestic refineries were able to process about 330,000 barrels per day, the highest level in industry of refining in the country. The Corporation shall continue to consolidate the progress so far made by keeping to the TAM schedules for the refineries and making funds available for their preventive, predictive and statutory maintenance programmes, thereby ensuring the petroleum products availability in all nooks and corners of the country. In addition, the Government has decided to eliminate the monopolistic tendencies and liberalize the downstream business through deregulation so that more players will be attracted to this strategic business and a general level playing field created for the industry. The benefits of this policy option are multifold, as it will enhance competition, efficiency, growth, enhance industrial capacity, expand employment opportunities thereby contributing to poverty alleviation in the country.

25. Still on the downstream activities, the Corporation is poised to promote and encourage the establishment of Urea and fertilizer plants and the development of petrochemical industry. The petrochemical industry supplies the basic industrial raw materials for the industrialization of any economy. It is in-fact a potent driver of economic growth all over the world. It provides intermediate feedstocks for certain industries as well as end products for everyday use. As at 1998, the per capita consumption of plastics in Nigeria was less than 2kg compared

to 8.3kg for China, 17.0kg for South Africa (1990) and 128kg for Germany. The large Nigerian population clearly underscores the potential for growth in this industry. This informed the initial plan to develop the petrochemicals industry in three phases. The enabling environment, the fiscal regime and the investment climate have significantly been improved to promote a private sector led development.

## **26. Strategies for Respositioning the Oil and Gas Industry**

The national aspirations of reserve and producibility enhancement, natural gas monetisation and increasing inter-sectoral linkages between the oil and gas sector and the rest of the economy cannot be achieved unless there is an efficient resource allocation and special attention is given to research and integrated development. Operational efficiency is the key word today in the industry and this is why we witness today, acquisitions and mergers in the industry. We will need to continue to embrace innovative ideas that will ensure that the country benefits maximally from the exploitation of its natural endowment. The following strategies must also be put in place if the industry is to be repositioned to face the challenges of the 3<sup>rd</sup> millennium and ensure sustainable economic development.

### **(i) Timely Funding of the Joint Venture Cash Calls:**

Before the present crude oil price recovery, the funding of Joint Venture Cash Calls has been a major challenge for the realisation of the nation's planned hydrocarbon reserves and producibility enhancement. Several millions of dollars have been owed to the operators and this has created some credibility problems for the nation. With the present Administration, the Government has paid more attention to the funding of JV operation and the budgetary allocation for the 2001 fiscal year was a testimony to this resolve. Outstanding arrears were being settled so as to encourage the operators and enhance additional foreign capital investment in the country. In addition, the Government has approved the alternative funding schemes whereby bankable development projects could be executed without recourse to the treasury. In an effort to reduce the financial burden of this strategic business, the Government has encouraged Production Sharing Contracts (PSC) for allocation of acreages. To effectively position the industry, therefore, the Corporation continues to ensure that fiscal regimes are competitive and attractive to all investors while guaranteeing the stability of operations.

**(ii) Capacity Building:**

The oil industry is technology driven. Over the years, technology has improved tremendously in all phases of the industry from surface geology to seismic data gathering and

interpretation, drilling, production, refining, shipping and distribution. In the upstream sub-sector, advances made in the acquisition, processing and interpretation of data in recent times will go a long way to effectively locate potential hydrocarbon deposits at reduced risk and cost. The Corporation will enter into profitable strategic alliances for potential transfer of technology and enhance its operational efficiency in these areas of operation. In addition, the Corporation will also maintain and enforce its Engineering policy that requires Joint Venture operators to undertake its detailed engineering work locally. It will also continue to encourage local fabrication work so as to effectively utilise local resources and enhance local value added. The attestation of the Nigerian Engineering and Technical Company (NETCO) as a world class engineering unit confirms that such local capacity is available in house and should be encouraged to develop further.

Though oil activities have spanned over four decades, efforts in research and integrated development has been limited. This will have to change. Towards this end, the Research and Development outfit in Port Harcourt will be encouraged to participate in collaborative researches and develop a modern research center with capability to use local materials as an input substitution strategy. This process has the inherent advantage

of boosting the entire local capacity building. The support of the entire oil and gas industry, on this drive, will be solicited.

**(iii) Reviewing Plant Maintenance Strategy:**

With the deregulation and liberation of the sector, on line and on stream availability becomes the index of plant performance. In order to ensure and maintain the integrity of equipment and facilities, a review of the maintenance strategy is being worked out. Equipment-focussed maintenance strategy will be developed while the training and development of the personnel will be aggressively pursued to ensure that the operators are up to date with the latest technology. The Corporation is poised to become a net exporter of both crude oil and petroleum products, as well as, meet the domestic raw materials required for the industrial take off of the national economy.

**(iv) Enhancing the Local Value Added:**

As previously indicated, the local content in the Nigerian oil and gas industry is very low. The Corporation will continue to support and encourage increased participation of local/indigenous core investors and engineering/contracting firms in the active participation in the industry. In addition, the Corporation will encourage the pooling of resources and skills

to form local consortiums independently or in association with foreign engineering and construction companies. This is an effort to take advantage of globalization and advances in technology, thereby developing the needed capability to face the challenges of the future.

(v) **Sustaining Industrial Harmony within the Oil Producing Communities**

It is generally appreciated that development can only thrive in an atmosphere of industrial peace and harmony. In the past few years, there have been increasing unrest in the oil producing areas because of the long neglect in terms of development. Flaring of associated gas, and other forms of pollution arising from oil activities have done a lot of damage to lives and properties as well as ecology of the oil producing areas.

To effectively tackle these problems, Government has established the Niger Delta Development Commission (NDDC), which is to pursue an integrated development of the entire Niger-Delta. In the course of time, both the economic and environmental issues will be adequately addressed and it is hoped that willful destruction of crude and product pipelines, flow stations and other forms of disturbances will stop.

## **27 Concluding Remarks**

Distinguished Ladies and Gentlemen, I have tried to review the Nigerian oil and gas industry, the problems, the future challenges and how it can be repositioned for sustainable economic development. The activities of the last two years in the industry are a testimony that there is light at the end of the tunnel. The current leadership of the industry is poised to aggressively reposition the industry for its traditional role and also enhance the inter-sectoral linkages that will enhance the per capita income and quality of life of the citizenry.

Thank you for your kind attention.

**J. T. Okubote**  
**Group General Manager**  
**CPDD, NNPC.**  
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