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Emerald Energy Institute, University of Port Harcourt

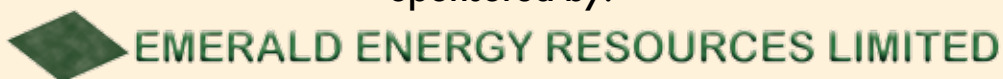
Port Harcourt Petroleum Roundtable No. 3

THEME: THE NIGERIAN OIL & GAS
ECONOMY, POST PIB.

PROCEEDINGS



Sponsored by:



DATE: FRIDAY JULY 5, 2013

VENUE: UNIVERSITY OF PORT HARCOURT



- 1: PANEL OF SPEAKERS
- 2: PROF. EFEOTOR
- 3: PROF. OTTI
- 4: PROF. GODWIN IGWE
- 5: DR BAKER
- 6: PROF. NIMI BRIGGS & PROF. DULU APPA
- 7: PROF. MIKE ONYEKONWU

Port Harcourt Petroleum Roundtable No. 3



Roundtable Overview

By Ikechi Ibeji

This mini roundtable was borne out of the need for Emerald Energy Institute for Energy Economics, Policy and Strategic Studies, University of Port Harcourt, to assert itself as a think tank for the energy industries of the Gulf of Guinea. It was conceived as a typical Town and Gown interactive platform, where operators, researchers and scholars meet to address industry problems and issues. The participants were carefully balanced through targeted invitations extended to knowledgeable people from industry and the academia. The presentations from all the speakers were excellent, complemented by quality contributions during the interactive session.

Having watched the government and other stakeholders prevaricate on the contents and passage of the petroleum industry reform law for over six years now, the leadership of the Institute felt a responsibility to make a wake up call for all concerned, that the world around us and indeed the global energy business is changing at a fast pace and not standing still,



• EGBOGAH

waiting for Nigeria to get her act together. Indeed, many of the advantages that would have accrued at the time the Bill was first proposed have vanished with all the West African countries discovering oil in the last five years, not to forget the difference technology has made on the new oil production volumes in the United States.

As Emerald Energy Institute (EEI) assumes its role in providing roadmaps and informed analyses of trends in the economy to guide policy makers and operators, this roundtable is auspicious in deepening and rounding out such strategic analyses for energy industry operators in particular, as well as help government officials in their policy reviews.

Talking points at the roundtable included the following:

- Successive Federal Governments since the Obasanjo regime have been pursuing reforms in the energy sectors. But they have been slow, particularly in petroleum, where the basic law that is to drive the reforms has been languishing in the National Assembly, mired in politics and other controversies about tax rates, government take and the participation of oil bearing communities.
- President Olusegun Obasanjo, after his milestone passage of the Nigerian Electric Power Reform Act 2004, a game changer for that sector, could not move fast enough in the Oil and Gas sector, although he had inaugurated the Oil and Gas Sector Reform Implementation Committee (OGIC) in April 2000.
- The National Oil and Gas Policy (NOGP) proposed by the OGIC focused on separating the commercial institutions in the oil and gas sector in Nigeria from the regulatory and policy-making institutions. However, the Obasanjo presidency did not have the time to fully achieve the proposed institutional restructuring.
- In September 2007, President Umaru Musa Yar'Adua reconstituted the OGIC with a mandate to translate provisions of the NOGP into functional institutional structures for the effective management of the oil and gas sector in Nigeria. And in particular to restructure the petroleum industry so as to facilitate expansion in non-oil sectors to achieve GDP growth levels that will put Nigeria among the top 20 largest economies in the world by 2020.
- The reconstituted OGIC, chaired by Dr. Rilwanu Lukman, had Dr. Emmanuel Egbogah, who was Special Adviser to the President on Petroleum Matters, as its main driver. The committee submitted a report in July 2008, which culminated in the first draft of the Petroleum Industry Bill.
- The OGIC report sought to achieve the following:
 - Replace outdated regulatory and institutional arrangements governing the Nigerian petroleum industry.
 - Introduce a new national petroleum policy framework, to address the myriad problems affecting the oil and gas industry in Nigeria.
 - Develop strategy and required action to make the national oil company competitive on a global platform.
 - Use pragmatic fiscal arrangements to address the main problems hampering growth and sustained expansion in the Nigerian oil and gas business, namely community

issues; funding and sustainability of E&P operations; viable structures for emergent commercial entities from the NOC; transition from the prevalent unincorporated joint ventures to incorporation of joint venture operations as autonomous commercial entities; introducing progressive policy instruments for existing and new PSCs and other concessionary fiscal arrangements.

- The work of the OGIC was encapsulated in the now famous or infamous PIB, which has had several incarnations. The elements which form areas of controversy that may see some change before the Bill is passed, relate mainly to the form the Community Equity Fund would eventually take and how it will be administered; some percentages relating to government's actual share in revenues through royalties and PPT (now hydrocarbon tax) charged, et cetera.
- In essence, the new Bill is a competition for space between provisions in the original Bill drafted in 2008, the submissions from an Inter-agency Committee set up by the Federal Executive Council to address and resolve areas of controversy; and another version of the Bill proposed by the former chairman of the Senate Committee on Petroleum, Senator Lee Maeba.
- The effort to resolve these controversies died with the last National Assembly when the bill did not pass before the end of that era. A new effort was started last year with a "Dieziani Bill", which tried to incorporate some of the settled issues, but started its own controversies.
- The roundtable set out to more or less look at the crystal ball and define the direction of the industry when the Bill finally passes. For instance, it was intended that the roundtable should help EEI define the efficacy of the PIB in achieving its objectives in the face of new world trends such as the rise in new oil and gas reserves in major consuming nations such as the United States; the emergence of new geopolitical energy strategic alliances and how the Nigerian economy will be impacted; Can the law reverse the trend where new investments in exploration have steadily declined over the last several years?
- The operation of the PIB is expected to drive prosperity for Nigerians. However, bearing in mind that petroleum is an exhaustible resource, can this prosperity be achieved in time, without consuming all the available resources, thereby leaving nothing for future generations?
- How should EEI approach the dilemma of avoiding the opportunity cost of today's unproduced oil and at the same time leave something for future generations? Norway has addressed this challenge through the institution of a Petroleum Trust Fund. Other major oil producers have set up huge Sovereign Wealth Funds to save for the future. Is this an option for Nigeria for example?

Brimming with the lofty ideals enunciated as the focus of the roundtable, the participants were thrown into near shock and a sober mood, while the room went very quiet as the Keynote Speaker, Dr. Joseph Ellah meticulously identified major shortcomings in the

Bill. Some of the key shortcomings he identified included among others, the nebulous provisions relating to funding for the Host Communities Fund, which in the end may leave the communities with nothing at all; inconsistencies of state withdrawal from direct operations in the sector and at the same time cornering a huge chunk for wasteful expenditure by civil servants; and excessive powers granted the President and the Minister of Petroleum, provisions he describes as a carry over from the military era.

The Panel Speakers were: Dr. Jude Amaefule, Vice Chairman/CEO of Emerald Energy Resources Limited; Engineer Emeka Ene, Chairman Petroleum Technology Development Association of Nigeria; Professor Bene Willie Abbey, Deputy Vice Chancellor, Research and Development, University of Port Harcourt; Dr. Dennis Amachree, Senior Regional Security Director (Sub-Saharan Africa) for General Electric; Engineer Oviasu, who represented Engineer Ernest Nwapa, Executive Secretary, Nigerian Content Development Board; Tajudeen Shobayo, Commercial Integration and BV Manager, SPDC; Professor Ogbonna Joel, Acting Director, Emerald Energy Institute; and Dr. Eme Ekekwe, Assistant Director, Emerald Energy Institute.

Quality contributions also came from the participants with interventions from such heavyweights as Professor Olawale Dosumu, Shell/Aret Adams Chair for Petroleum Engineering, University of Port Harcourt; Professor Efeotor, Professor Goddy Igwe, Professor Otti and Professor Mike Onyekonwu, Director, Institute of Petroleum Studies, University of Port Harcourt. Paul Michael Wihbey of GWEST LLC, WASHINGTON DC also made a proxy presentation.

Apart from the core issues of funding, investment and operations raised by Dr. Ellah, an important area that resonated with participants was the question of participation of the host communities in the oil and gas business, not only to ensure security but as a demonstration of fairness and equity, given the impact of oil production on their communities and livelihoods. With the inadequacies identified, it may be necessary for the National Assembly to revisit the Egbogah Model for host communities' participation. Excerpts from the revised Egbogah document issued in May 2010 are included in these proceedings.

KEYNOTE SPEAKER:



THE PETROLEUM INDUSTRY BILL 2012: IMPLICATIONS FOR NIGERIA

By Dr. Joseph Ellah

The Petroleum Industry in Nigeria has for many years remained our major source of national income and the Niger Delta of Nigeria has remained the principal area where the mineral is found and exploited. It is therefore necessary that the University of Port Harcourt, situated in the heart of the Niger Delta contributes to the discussion on charting a transparent and viable path for the reform of the industry via the Petroleum Industry Bill.

Accordingly, this paper is to highlight the implications of sections of the Bill to all stakeholders, including the Federal Government, host communities, the international oil companies, (IOCs), Local Oil Companies, State and Local governments et cetera.

Since the commencement of oil Exploration in Nigeria in 1907 by the Nigerian Bitumen Company – a German Company whose efforts at Okitipupa in Ondo were fruitless; and the entry of Shell D'Arcy (now Shell Petroleum Development Company of Nigeria, SPDC), which indeed acquired exclusive exploration rights over the entire Nigerian territory, a lot of changes have occurred in the Nigerian oil terrain. The discovery of oil in commercial quantities at Oloibiri in 1956 and the first export of 4,987 b/d of the 5000 b/d to UK encouraged further exploration.

At independence in 1960, Nigeria was producing up to 17,397 b/d. This successful operation attracted other multinationals, so that by 1961 we had up to eight multinational companies or international oil companies in Nigeria.

Initially, Government refrained from direct participation in the oil Industry because of high risks, intricate technology and huge capital investment required, which were lacking in the country. Government decided to be fully involved as the

industry became more strategic and decided to acquire shares in existing oil firms.

For example – In 1971 the Federal Government acquired 33.33 per cent in Agip and progressively increased its shares in all oil companies in Nigeria to 60 per cent and 80 per cent in Shell. However, recently these have reduced to about 57 per cent on the average.

Nigeria, in 1971 joined OPEC which was created in 1960 by five countries to counter the activities of multinationals, who, not only determined the level of crude oil production but also decided on the prices paid for the crude. In the same year NNOC (Nigerian National Oil Corporation), which later merged with the then Inspectorate Division of the Ministry of Petroleum Resources to become NNPC (Nigerian National Petroleum Corporation) was formed. Our crude oil production grew steadily from 17,400b/d in 1960 to 2.26 mb/d in 1974.

While these developments were going on, we did not have any comprehensive statute or laws designed to guide all aspects of oil and gas exploitation, production, transportation, refining et cetera. Nigeria's participation was under different arrangements – Joint Venture arrangements, production sharing contracts, joint commissions, sole risk contracts, oil services arrangements under various land ownership systems, before the current land use act.

Most of the regulations guiding the industry have been ad hoc in nature and a number of them have suffered several revisions.

Indeed, Government's participation has been governed by MOU (Memorandum of Understanding) and JOA (Joint Operating Agreements) entered into with different companies. There is therefore a need

to produce a single document that will harmonize and in detail map out the direction the Nigerian Oil and Gas Industry should follow, hence the Petroleum Industry Bill. The Petroleum Industry Bill is a new and unified legal framework for the re-organization and operation of the Nigerian Petroleum Industry. The proposed Legislation is the outcome of the work of the Oil and Gas Reform Committee and several other committees supervised by the Federal Ministry of Petroleum Resources.

These Federal level committees did not involve State Government Agencies or Local Communities for input before formulating the bill which is expected to affect all of them.

For the efficient management and administration of the nation's oil and gas industry, the Bill seeks to create several structures, institutions, and organizations with corresponding enabling powers for various organs. These include Petroleum Technical Bureau, Upstream Petroleum Inspectorate, Downstream Petroleum Regulatory Agency, Petroleum Technology Development Fund, Petroleum Equalization Fund, Petroleum Host Community Fund, Petroleum Assets Management Corporation, Petroleum Assets Management Company Ltd, and National Oil Company.

The Bill also provides for divestment of shares of the National Oil Company and the National Gas Company; Powers of the President to Grant licenses in special circumstances; deregulation, remediation of the environment, national strategic stock, franchise areas for gas processing facilities, duty to restore the environment, various tax reforms and other incentives.

This bill is therefore expected to:

(a) Guarantee the uninterrupted flow of the Nigerian oil and gas with a view to restoring, recapturing and creating investor confidence in the industry.

(b) address or redress the issues that gave birth to current challenges in the Niger Delta.

Let us now navigate through the bill in some detail and explore the implications for Nigeria and its future. What are the objectives of the bill?

PART I

1. OBJECTIVES

The objectives of this Act are to –

- a. Create a conducive business environment for petroleum operations;
- b. Enhance exploration and exploitation of petroleum resources in Nigeria for the benefit of the Nigerian people;
- c. Optimize domestic gas supplies, particularly for power generation and industrial development;
- d. Establish a progressive fiscal framework that encourages further investment in the petroleum industry while optimizing revenues accruing to the government;
- e. Establish commercially oriented and profit driven oil and gas entities;
- f. Deregulated and liberalize of the downstream petroleum sector;
- g. Create efficient and effective regulatory agencies;
- h. Promote transparency, and openness in the administration of the petroleum resources of Nigeria;
- i. Promote the development of Nigerian content in the petroleum industry;
- j. Protect health, safety and the environment in the course of petroleum operations; and
- k. Attain such other objectives to promote a viable and sustainable petroleum industry in Nigeria.

There is a word Nigerians would like to hear – the missing link - that is accountability – The objectives have clearly excluded it, so may we suggest that for completeness, item “h” should be amended to read.

h. Promote transparency, openness and accountability in the administration of the Petroleum resources of Nigeria.

This then takes us to the very important issue of ownership of Petroleum Resources. The Bill states as follows: Part 1, Section 2.

2. OWNERSHIP OF PETROLEUM RESOURCES

“The entire property and control of all petroleum in, under or upon any lands within Nigeria, its territorial waters, or which forms part of its Continental Shelf and the Exclusive Economic Zone, is vested in the Government of the Federation.” One would wish that the ownership rights of the “host communities” or oil producing communities be

recognized and this could be amended to read Federal Government and the Governments of the Oil Producing States, this is in recognition of the ownership rights of the host communities for whom the Governors hold the land in trust, for the people, as contained in sections of the solid minerals act which is similar to the PIB. Indeed, the idea of Host Community Fund as covered later in the Bill will now derive its foundation.

The main officer whose responsibility is to oversee the industry outside the President is the Minister of Petroleum Resources. What are the functions of the Minister under this act?

PART II INSTITUTIONS

A. THE MINISTER

The Minister of Petroleum Resources shall be responsible for the co-ordination of the activities of the petroleum industry and shall exercise general supervision over all operations and all institutions in the industry.

FUNCTIONS AND POWERS OF THE MINISTER

1. The Minister shall –
 - a. Be responsible for the formulation, determination and monitoring of Government policy for the petroleum industry in Nigeria;
 - b. Exercise general supervisory functions over the affairs and operations of the petroleum industry;
 - c. Report developments in the petroleum industry to the Federal executive Council;
 - d. Advise the Government on all matters pertaining to the petroleum industry;
 - e. Represent Nigeria at meetings of international organizations that are primarily concerned with the petroleum industry;
 - f. Negotiate and execute international petroleum treaties and agreements with other sovereign countries, international organizations and other similar bodies on behalf of the Government.
 - g. Upon the advice of the Inspectorate, grant, amend, renew, extend or revoke upstream petroleum licenses and leases pursuant to the provisions of this Act;
 - h. Upon the advice of the Agency, grant, amend, renew, extend or revoke downstream petroleum licenses for gas transportation pipeline, gas distribution networks,

refineries, LNG and GTL plants, petrochemical plants and gas exports.

i. Advise the President on the appointments of the chief executives of the Upstream Petroleum Inspectorate, Downstream Petroleum Regulatory Agency, the National Oil Company, the Asset Management Corporation and any other Government Agency or corporate entity established or to be established pursuant to this Act;

j. Have access at all time to areas or rights of way covered by existing licences, leases, permits and authorizations or any related offices or buildings, and all installations to which this Act applies, for the purpose of inspecting operations conducted and accessing information available therein, and enforcing the provisions of this Act and any regulations made under this Act; and

k. Do all such other things as are incidental and necessary to the performance of the functions of the Minister under this Act.

2. The Minister may in writing delegate to any other person or institution any power or function conferred on him by or under this Act except the power to make orders and regulations.

Rights of Pre-Emption

1. In the event of a state of national emergency or war, the Minister shall have the right of pre-emption of all petroleum and petroleum products obtained, marketed or otherwise dealt with under any license or lease granted under this Act.

2. The provisions of the First Schedule to this Act shall have effect in relation to the right referred to in subsection (1) of this section.

3. Any person, who without reasonable excuse, the burden of proof of which shall lie on the person, fails to comply with a requisition made by or on behalf of the Minister under paragraphs 1, 2 or 7 of the First Schedule to this Act, or fails to conform or to obey a direction issued by the Minister under paragraph 8 of the First Schedule to this Act, commits an offence and is liable on conviction to a fine not exceeding N2,500,000.00

4. Any person who obstructs or interferes with the Minister, his servants or agents in the exercise of the powers conferred on the Minister under paragraph 8 of the First Schedule to this Act commits an offence and is liable on conviction to

a fine not exceeding N5,000,000 or to imprisonment for a period not exceeding two years, or to both.

REGULATIONS

1. The Minister may, or on the advice of any of the agencies established under this Act and subject to the provisions of subsections (2) and (3) of this section, make regulations necessary to give proper effect to the provisions of this Act.
2. The Minister shall, prior to making any regulation under this Act, conduct an inquiry in the manner specified in subsection (4) of this section on the subject matter of the proposed regulations.
3. The Minister shall, in making any regulation take into consideration the findings of the inquiry under subsection (2) of this section.
4. Subject to subsection (2) of this section, when the Minister decides to hold a public inquiry, he shall publish in at least two national newspapers, notice of
 - a. The fact that he is holding the inquiry;
 - b. Invitation to members of the public to participate in the public inquiry;
 - c. The venue and period during which the inquiry is to be held;
 - d. The nature of the matter to which the inquiry relates;
 - e. The matters that the Minister would like the submissions to deal with;
 - f. The form in which members of the public are to make submissions to the Minister on the subject matter of the inquiry;
 - g. The period of public notice for the commencement of the public inquiry which shall not be less than twenty-one days; and
 - h. The address or addresses to which the submissions may be sent.
5. The Minister may not publish at the same time or in the same manner the notice of all matters referred to in subsection (4) of this section.
6. Notwithstanding the provision of subsection (2) of this section, the Minister may, due to the exigency of the circumstances, make any regulation without conducting an inquiry, where he deems it necessary to do so.
7. Any regulation made pursuant to sub-section (6) of this

section shall be valid for no longer than twelve months with effect from its commencement date, unless it is confirmed after a public inquiry.

In all of these the Minister is not “accountable” to any person. You may in your comments determine whether it would not be necessary to amend the Role of the Minister to Read, “The Minister of Petroleum Resources shall be responsible for the coordination of the activities of the petroleum Industry and shall exercise general supervision over all the operations and institutions of the Industry subject to the approval of the Federal Executive Council” as a way of being accountable to the people and Nigeria.

In the same vein section 8(6) which states that “Notwithstanding the provisions of subsection (2) of this section, the Minister may due to the exigency of the circumstances, make any regulation without conducting an inquiry, where he deems it necessary to do so”, such ouster clauses should be expunged, in my opinion because they can be abused and would not provide avenue for fair hearing and proper administration.

In addition to such obnoxious provisions the Petroleum Minister would recommend for appointment members of all the agencies to be set up and would chair several committees, e.g. – PTDF, PEF, Nigeria Petroleum Assets Management Company etc. The powers of the Minister are indeed too much – Indeed you cannot know what a man is, until you give him power.

This round table may find it necessary to look at the various institutions proposed to be established under this bill and determine the relevance of such establishments and whether the current provisions can help in our efforts to realize the set objectives.

I shall make a few short remarks on some of these and allow discussants at the round table to critically review the details and make appropriate recommendations. My remarks would mainly be on the concerns shown by various stakeholders including the communities, local governments, state governments, and the oil industry community especially the IOCs.

PETROLEUM TECHNICAL BUREAU

9. Establishment of the Petroleum Technical Bureau
 1. There is established under this Act, the Petroleum

Technical Bureau (in this Act referred to as “the Bureau”) as a special unit in the office of the Minister.

2. The Bureau shall consist of professionals with expertise in the upstream and downstream sectors of the petroleum industry as the Minister may from time to time deem appropriate for the effective discharge of the functions of the Bureau.

3. The Bureau shall in addition to its other duties, carry out the functions of the former Frontier Exploration Services of NNPC.

The functions of the Bureau shall be, working in conjunction with other departments of the Ministry to –

- a. Provide technical and professional support to the Minister on matters relating to the petroleum industry;
- b. Assisting the Minister in the formulation and development of strategies to implement Government policy on the petroleum industry;
- c. Assist the Minister in monitoring the implementation of Government policy on the petroleum industry;
- d. Identify opportunities and increase information about the petroleum resources base within all frontier acreages in Nigeria;
- e. Develop exploration strategies and portfolio management for the exploration of unassigned frontier acreages in Nigeria;
- f. undertake studies, analyze and evaluate all unassigned frontier acreages in Nigeria;
- g. Undertake activities to stimulate the interest of local and international oil and gas companies in exploration of the frontier basins of Nigeria to increase Nigeria’s petroleum resources; and
- h. Perform such other functions as the Minister may from time to time direct, in accordance with the provisions of this Act.

11. STAFF OF THE BUREAU, ETC.

1. The Staff of the Bureau shall be selected for appointment through a transparent recruitment process.
2. The remuneration and conditions of service of the staff of the Bureau shall be at a level sufficient to attract qualified professionals within the petroleum industry and shall take into account:
 - a. The specialized nature of work to be performed by

such staff;

- b. the need to ensure financial sufficiency of the Bureau; and
- c. the salaries paid in the private sector to individuals with equivalent responsibilities expertise and skills.

12. PENSIONS

1. Employment in the Bureau shall be subject to the provisions of the Pensions Reform Act and officers and employees of the Bureau shall be entitled to pension and other retirement benefits as prescribed under the Pensions Reform Act.

2. Subsection (1) of this section shall not prohibit the Bureau from appointing a person to any office on terms that preclude the grant of a pension or other retirement benefits in respect of that office.

b. Assist the Minister in

- The Petroleum Technical Bureau – as contained in Part II, Section B,

Section 9 of the Bill implies that a new bureaucracy of technocrats would be set up as a unit in the Minister’s office with different salary structure and to carry out advisory and operational functions including such operations that were carried out by the Frontier Exploration Services of NNPC. Is this new Bureaucracy necessary when the Minister has his Ministry officials, Permanent Secretary, Directors, Special Assistants, Special Advisers, Upstream and Downstream agencies and various companies? etc. and such agencies as listed earlier with highly professional experts. I would think this is an unnecessary bureaucracy and should be expunged. The implication for such additional bureaucracy would be huge for Nigeria if other Ministries imitate the Ministry of Petroleum.

In the same vain I think you may find that the Frontier Exploration Service is a way to politicize a purely commercial venture. Where ever there is oil, the oil majors and minors will go there, search for oil and when they find it, they would obtain necessary licences and get it out (explore and drill). Nigeria did not produce a huge basket of money for oil exploration before oil was discovered in Nigeria or before commercial oil and gas activities commenced. At the moment, this nation has expended huge resources

in the Chad Basin and similar places under the guise of Frontier Exploration Services. Why not leave a commercial activity to the private sector. What about deep offshore? Are those not frontier regions?

Upstream Petroleum Inspectorate and Downstream Petroleum Regulator Agency. The powers of the Inspectorate as contained in Part II Section C, Section 16 (a).

Powers of the Inspectorate, provides that the Inspectorate in carrying out its function shall have power to modify, extend, renew, suspend and revoke any licence or permit issued by it, pursuant to the provisions of this Act;

There is need for some checks and balances for the very wide and far reaching powers of the inspectorate. The roundtable may wish to consider whether it would not have been better to suggest that those functions be carried out with the approval of the Minister.

The funding programme for the Inspectorate and the Agency seem to have the capability of creating serious problems for Nigeria Section 32 Funding. States as follows:

FUNDING

1. The Inspectorate shall establish and maintain a fund ("the Fund") from which all expenditures incurred by the Inspectorate shall be defrayed.

2. The Fund shall comprise monies derived from the following sources:

- Such moneys as may be appropriated to the Inspectorate from time to time by the National Assembly;
- Fees charged for services rendered to holders of upstream licences, permits or other authorizations;
- Income derived from publications produced by the Inspectorate and from reviews of environmental impact assessment reports and environmental evaluation reports and other related activities;
- Fees for services rendered to non-petroleum producing companies and service companies and for other services performed generally etc.

This programme authorizes the Inspectorate to create a "Fund"; It can remit revenue to and spend from. One would expect that for purposes of transparency and accountability, All Sums to be expended by the Inspectorate or Agency shall be appropriated by the National Assembly. Generally, agencies seek or are desirous to acquire financial autonomy

while such autonomy may be right for the judiciary and national Assembly it may not be proper for government agencies.

The same also applies Section 62(2)(a) on funding for the Downstream Petroleum Regulatory Agency.

Petroleum Technology Development Fund (Section 74). The establishment of this Fund is laudable, however a brief study of the sources of the Development Fund shows that sufficient funds may never be derivable from the listed sources of funds – namely:-

- The balance of monetary assets outstanding as at the Effective Date in the accounts of the Petroleum Technology Development Fund established by the Petroleum Technology Development Act, 2004;
- Funds and grants accruing from multilateral agencies, bilateral institutions and related sources dedicated partly or wholly to the development of technology, capacities and capabilities in the Nigerian petroleum industry;
- Any other sum, which may from time to time be freely donated or accruing to the Government or the Development Fund for development of petroleum technology, Capacities and capabilities or the training and education of Nigerians in the petroleum industry; and
- Monies in the accounts of the Development Fund together with interest payable in respect of such monies. Nothing above seems certain.

Where an agency is created with insufficient Funds then such an agency is not expected to fulfill its designated functions.

Petroleum Equalization Fund: one would have expected that this fund's existence be terminated, however since it is expected to naturally terminate with full deregulation, it would be good to operate in a minor way, really like a company or a fund being wound up. 100(4).

Petroleum Host Communities Fund Section 116: The creation of this fund has generated a lot of debate and we need to carefully study the provisions here. PETROLEUM HOST COMMUNITIES FUND, Part II, Section 116 – 118.

Establishment of the Petroleum Host Community Fund There is established a fund to be known as the Petroleum Host Communities Fund (in this Act referred to as "the PHC

Fund").

Purpose of the PHC Fund

The PHC Fund shall be utilized for the development of the economic and social infrastructure of the communities within the petroleum producing area.

BENEFICIAL ENTITLEMENTS TO THE COMMUNITIES

1. Every upstream petroleum producing company shall remit on a monthly basis ten percent of its net profit as follows:

- For profit derived from upstream petroleum operations in onshore areas and in the offshore and shallow water areas, all of such remittance shall be made directly into the PHC Fund; and
- For profit derived from upstream petroleum operations in deepwater areas, all of the remittance directly in to the Fund for the benefit of the petroleum producing littoral States.

2. For the purpose of this section 'net profit' means the adjusted profit less royalty, allowable deductions and allowances, less Nigerian Hydrocarbon Tax, less Companies Income Tax.

3. At the end of each fiscal year, each upstream petroleum company shall reconcile its remittance pursuant to subsection (1) of this section with its actual filed tax return to the service and settle and such difference.

4. The contributions made by each upstream petroleum company pursuant to subsection (1) of this section, will constitute an immediate credit to its total fiscal rent obligations as defined in this Act.

5. Where an act of vandalism, sabotage or other civil unrest occurs that causes damage to any petroleum facilities within a host community, the cost of repair of such facility shall be paid from PHC Fund entitlement unless it is established that no member of the community is responsible.

6. The Minister shall, subject to the provisions of section 8 of this Act, make regulations on entitlement, governance and management structure with respect to the PHC Fund established under this Act.

The Fund as defined has generated a lot of debate but a critical look at the fund shows that it is rather hollow and empty. When you deduct 25% Royalty, 50% hydrocarbon tax, allowable deductions, (section 313) and allowances

etc.), companies income tax. What will be left? One would have suggested the possibility of creating a fund that is straightforward to calculate and straight-forward to administer. Why pay for acts of sabotage, vandalism, civil unrest through the fund? Whose duties is it to police the country and the oil fields? The round table should look at the possibility of suggesting a percentage of Royalty as the host community fund with a straight forward calculation mechanism and no extraneous charges made on the fund; The Bill is very deficient in its current form – who is the Host Community? Owner of oil and gas wells? What about pipelines and the communities through where they pass? When pollution occurs or gas is flared what about the communities who suffer the effect yet do not own oil wells or pipelines.

Definition of Host Community should be explicit and precise.

How many Funds? One Fund for each community? Who controls it? What relationship would the communities have with a single fund set up under the control of the Minister? Indeed, more work needs to be done on definition, source of fund and coverage in addition to exact beneficiary, and manner of disbursement. Even the industry players are not sure how to account for net profit. They are not sure whether it is additional tax? Or credit against current tax? And whether it is based on chargeable or assessable profit? This Host Community Fund has been a hard and a long struggle, it needs to end without creating more problems than it set out to solve.

NATIONAL OIL COMPANY

This ought to be of very great concern to all God fearing and well meaning Nigerians. The idea of floating a National Oil Company is a great idea but some underlying propositions signal great danger to this nation.

The provisions are as follows:-

1. NATIONAL OIL COMPANY – Section 148 – 152.

Incorporation of the National Oil Company

The Minister shall, not later than three months after the effective date, take such steps as are necessary under the Companies and Allied Matters Act to incorporate the National Oil Company as a public company limited by shares, which shall be vested with certain assets and liabilities of the NNPC.

Exemption from application of certain existing laws
The National Oil Company shall not be subject to the provisions of the Fiscal responsibility Act 2007 and the Public procurement Act 2007.
Share holding in the National Oil Company – Section 150.
At the time of its incorporation, the initial shares of the National Oil Company shall be held by a nominee of the Ministry of Petroleum Resources and Ministry of Finance Incorporated on behalf of Government.

Divestment of shares of the National Oil Company – Section 151
Notwithstanding the provisions of section 150 of this Act, the Government shall at any time within six years from the date of incorporation of the National Oil Company, divest up to thirty percent of the authorized shares of the National Oil Company to the public in a transparent manner on the Nigerian Stock Exchange.
The greatest danger of the century
Transfer of assets and liabilities
1. Following incorporation of the National Oil Company, the assets and liabilities held by the NNPC on behalf of the Federal Government of Nigeria except the interests in the unincorporated joint ventures and Nigerian Gas Company Limited shall be vested in the National Oil Company Within twelve to twenty four months from the Effective Date.

2. The transfer of liability or obligation under this section releases the NNPC from the liability or obligation with respect to the transferred assets.
3. The National Oil Company shall without further assurance be entitled to enforce or defend all obligations for or against NNPC in respect of the portion of interests mentioned above as if the National Oil Company were the original party to such obligations.
4. In relation to the transferred assets, all bonds, loans, financing agreements, alternative financing agreements, joint operating agreements, production sharing agreements, sole risk agreements, hypothecations, securities, deeds, contracts, instruments, documents and working arrangements subsisting immediately before the initial transfer date and to which NNPC was a party shall, on and after the initial date, be as fully effective and enforceable against or in favour of the National Oil

Company as if, instead of NNPC, the National Oil Company had been named therein.
5. Any pending action or proceeding in relation to the transferred assets, brought by or against NNPC immediately before the initial transfer date may be enforced or continued, as the case may be, on and after that date by or against the National Oil Company in the same way as if this Act had not been passed.

ISSUES OF GREAT CONCERN

In line with the proposed amendment to section 2 on “ownership of Petroleum Resources”, it is hard to accept the transfer of Nigeria’s assets and liabilities to the National Oil Company who will in turn privatize same, because it is tantamount to selling in perpetuity the Oil and Gas reserves of the Nation to private persons. The people of the entire Niger Delta would vehemently oppose the idea of a National Oil Company Plc, (a company) to which all the assets and liabilities held by the Federal Government of Nigeria except interest in the unincorporated joint venture and the Nigerian Gas Company is to be vested; and which National Oil Company (Plc) shall at any time within six years from the date of its incorporation divest up to 30 percent of its authorized shares to the public in the Nigerian Stock Exchange, for the following reasons:

1. Section 28 of the controversial Land Use Act, Cap 5 of the Laws of the Federation 2004, authorizes revocation of a person’s right of occupancy for over-riding public purpose, the Law however frowns at a situation where a person’s right of occupancy is revoked for overriding public interest, over a piece of land, only to give that same piece of land to another private person, as being proposed in this case. The people of the Oil producing areas are yet to come to terms with the “confiscation” by the Federal Government of their God-given Petroleum Resources, through the obnoxious land use decree. They will certainly be further incensed by these provisions which seek to hand over these same resources to other persons.

2. If and when these provisions of the Bill come into effect, the shares of the company will most likely be given to a few persons as the already impoverished people of the Oil producing states stand little or no chance of being in a position to buy back their resources. Our experience shows that privatization programmes in Nigeria have hardly been

transparent.

3. The Constitution of the Federal Republic of Nigeria vests the Petroleum Resources of the Niger Delta in the Government of the Federation for the benefit of the generality of the Nigerian people and not that these resources behind our houses should be passed on to connected individuals/third parties.

4. Indeed, the Nigerian Mineral and Mining Act 2007 recognizes the right of host communities to winning of certain minerals. It will be necessary to sound a serious note of warning here. Many past rulers have made several efforts to appropriate all the oil and gas in Nigeria to themselves e.g. Abacha’s.

- Privatization and contract management of NNPC companies and
- Vision 2010 and divestment of the Upstream, which is sell off all the oil and gas reserves underground. The same is coming up under a bolder and direct form. It poses great danger to the economy of this country and to OPEC and higher prices of crude.

If divestment must take place, let us take one step at a time.
21.0 Section 151 – Divestment of shares of the national oil company should be amended to

- limit the percentage of the authorized shares to be divested to a maximum of ten percent and no more as was the case in the earlier PIB – 2008.
- 50% of the shares to be divested should be offered to the oil producing states on behalf of the indigenes of the states. The State Governments can acquire them for the citizens of those states.

NATIONAL GAS COMPANY

We also need to study in detail the provisions of this bill as regards the National Gas Company Plc.

159. Incorporation of the National Gas Company
The Minister shall, not later than three months after Effective Date of this Act, take such steps as are necessary under the Companies and Allied Matters Act to incorporate the National Gas Company Plc as a company, limited by shares, which be vested within certain assets and liabilities of NNPC.

160. Exemption from certain existing Legislation
The National Gas Company Plc shall not be subject to the

provisions of the Fiscal Responsibility Act 2007 and the Public Procurement Act 2007.

161. Shareholding in the National Gas Company Plc
At the time of its incorporation, the initial shares of the National Gas Company shall be held by a nominee of the Ministry of Petroleum Resources and Ministry of Finance Incorporated on behalf of the Government.

162. Divestment of shares of the National Gas Company Plc
Notwithstanding the provisions of section 161 of this Act, the Government shall at any time within six years from the date of incorporation of the National Gas Company Plc, divest up to forty nine percent of the shares of the National Gas Company to the Public in a transparent manner on the Nigerian Stock Exchange.

This is a very uncomfortable proposal. Nigeria is a gas Province dotted with some oil. Government is proposing through this bill to hand these over to private persons, cronies, political jobbers and money bags.

This is the resource on which our nation would rely for many future decades. A sell off to private individuals under whatever guise would certainly not serve the economic interest of this nation or future generations. These outright sales would jeopardize the existence of OPEC, whose creation has helped in very many ways to shore up our national revenue and its demise would also hurt all of us. We, therefore, need to be very careful and should we divest at all, for whatever reason, it should not be such that Nigeria is no longer in control of over 55% of its gas holdings. And we should not divest more than 10% out of which 5% should go to citizens of the oil producing communities. The negative implications of these wholesale sell off proposals can hardly be imagined. There is hardly any investment worldwide more profitable than investment in oil and gas. Why sell off all your national assets?

Picture a situation, one year after the incorporation of this bill when people of Nigeria and indeed Niger Delta wake up to find that the oil resources at the back of their houses, no longer belongs to the country but has been entirely sold to some foreigners or other Nigerians and that the Nigerian Nation would be concerned with only tax collection, which will continue to reduce as rise in production costs and lack of supervision prevail. Indeed all future governments will suffer financially and the people of Nigeria will suffer most. Why does every Nigerian leader, politician, general etc

want some oil block for himself? Greed can never do the nation any good in terms of economic growth or security.

OIL INDUSTRY CONCERN

The concern of most major players in the oil Industry is the various tax provisions. They believe that generally there are problems with the Hydrocarbon tax and etc, Royalties, deductible allowances, profit oil split, (PHCF, New Host Community Fund of 10%), whether it is credit against tax or a new tax and whether it is based on chargeable or assessable profit. It is believed that based on worldwide government take, the Nigerian government is having more take, lower only than that of Libya. The sum total is that they believe that the viability of new projects within industry portfolio under current PIB terms (\$80/bbl) would reduce drastically, with JV Oil dropping by 23%, JV gas moving down by 87% and Deepwater projects being wiped out all together. However, the statistics provided, by them does not warrant the huge clamour because it shows that total government take would move up only slightly. The statistics provided however should be global and not selective and its source should be confirmed by NNPC and indeed the entire exercise should be carried out with the participation of NNPC and staff of the Ministry of Petroleum Resources and DPR. This will ensure that the taxes and Royalties are competitive in order to have a vibrant oil Industry where all stakeholders are comfortable. Finally, I would like to mention the very interesting carry over from our military heritage.

Powers of the President to Grant Licences and Leases in special circumstances, Section 191. It would be necessary to review the provisions for the Award Process for licences and lease.

190. AWARD PROCESS

1. The grant of a petroleum prospecting licence or a petroleum mining lease not derived from a petroleum prospecting licence in respect of any territory in, under or upon the territory of Nigeria shall be by open, transparent and competitive bidding process conducted by the Inspectorate pursuant to the provision of subsection (2) of this section.

2. The winning bidder shall be determined on the basis of the following bid parameters:

a. single bid parameter, which can be based on:

(ii) signature bonus;

(iii) a royalty percentage in addition to the relevant subsisting royalty percentage;

(iv) a work commitment in terms of number of wells to be drilled to a specified minimum depth during the initial exploration period; or

(v) work units.

c. a combination of the parameters indicated under paragraph (a) of this subsection, based on a point system that is self-assessable by the bidder in such a manner that the bidder will bid the respective points and the highest points determine the winning bidder.

3. There shall be no grant of discretionary awards, except as provided under section 191 of this Act.

4. The Minister shall direct the Inspectorate to call for bids in accordance with a process that shall be made available to the general public through publications on the website of the Inspectorate and in at least two newspapers with international coverage and two newspapers with national coverage.

5. Where the Minister directs for a call for bids pursuant to sub-section

1. Of this section, the Inspectorate shall propose the technical, legal, economic and financial requirements as well as the minimum experience and capacity necessary for prospective licensees, and lessees, which shall be contained in guidelines prepared by the Inspectorate and approved by the Minister, and without prejudice to the provisions of subsection (2) of this section, licensees, lessees and contractors shall be chosen in accordance with these guidelines.

6. All bids received based on the bid parameters established in subsection (2) of this section shall be processed in accordance with the published guidelines and monitored by the Nigeria Extractive Industries Transparency Initiative (NEITI).

After all the effort at being transparent and open then a new clause is introduced – a military clause – which guarantees total denial of accountability and the clause states – Section 191

191. Powers of the President to grant licences and leases in special circumstances: Notwithstanding the provisions

of subsection (3) of section 190 or any other provisions of this Act, the President shall have the power to grant a licence or lease under this Act.

Such powers which are a carryover from our military era - unitary Government and supreme power of the Head of State ruling via supreme military councils have consistently led to abuses and corruption and should be expunged.

In line with our Lord's Prayer we should not lead our President into temptation. Such powers are too much for a man to have without misusing them from time to time. Do not make a good law and then turn around and tear it up.

The suggested amendments would certainly enhance the quality of the bill for a progressive oil Industry where all stakeholders operate in peace and prosperity.

Thank you and may God bless all of you. Amen.



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UNIVERSITIES, RESEARCH & DEVELOPMENT, POST PIB

PROFESSOR BENE WILLIE ABBEY,
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UNIVERSITY OF PORT HARCOURT



INTRODUCTION

The Nigerian Petroleum Industry Bill, which was drafted in 2008 and submitted to National Assembly in 2009, is still awaiting passage into law.

The bill, when implemented, is expected to restructure the oil and gas sector by making it more efficient, improve government's income and increase natural gas utilization.

This paper discusses the impact the PIB would make in promoting the research functions of universities and research institutes and concludes that the enactment of the bill is welcome, to instill discipline and promote efficiency and professionalism in the sector.

THE NIGERIAN OIL AND GAS INDUSTRY

The Nigerian oil and gas industry is fundamental to the Nigerian economic growth activities and has played a towering role since the early 1970's. It is the predominant source of the country's foreign exchange earnings and is responsible for most of Nigeria's access to international investments.

By 1990, the Industry's contribution to government revenue rose up to 97.24 per cent. It has also created enormous employment and contract opportunities in the country.

However, there are serious negative impacts of the oil activities in the country due to oil spillage, gas flaring and waste disposal. These have resulted in ecosystem degradation, exposing the oil bearing communities to health hazards and limited agricultural activities, as well

as loss of environmental biodiversity. The Nigerian oil and gas sector is generally believed to be plagued with gross inefficiency, corruption and abuse, which have resulted in low performance.

IMPACT OF OIL AND GAS INDUSTRY ON AN ECONOMY

Generally, the oil and gas industry drives economic growth in the any country blessed with hydrocarbon resources, and always accounting for a good percentage of revenues accruing to the treasuries of such countries.

The revenues when administrated responsibly, result in massive development of education, transportation, health, safety and information communication backbone of the country; development of technology and service delivery, leading to lots of job opportunities.

For example, in 2009, the total value added by the petroleum industry to the U.S economy was more than USD one trillion or 7.7 percent of its gross domestic product, and more than nine million jobs. The industry also provides more than 60per cent of US total energy demand.

THE PETROLEUM INDUSTRY BILL (PIB)

The PIB is designed to provide the legal and regulatory framework that will guide the operations of the Nigerian petroleum industry. The objective of the PIB is to overhaul and bring sanity and transparency into the industry, which has been marked by gross inefficiency and poor management.

The concept of the bill was initiated in 2007 through the

constitution of an Oil and Gas Reform Implementation Committee (OGIC) and in 2008 the first draft was crafted and forwarded to the National Assembly for consideration and eventual passage into law. Amendments have been made to the original draft while the second hearing has been achieved. It is hoped that the enactment would be concluded soon.

EFFECTS OF THE PIB

The PIB is designed to correct the flaws in the existing laws that govern the operations of the oil sector.

An important feature of the bill is creation of new institutions, which would replace the existing ones. The new bodies are vested with clearer defined responsibilities and greater autonomy that would engender better performance.

Also, the bill is to give a more transparent administrative system to enable interested parties assess information in a more just and equitable manner. Regarding revenues, the bill emphasized rents and royalties rather than taxes, which are subject to all forms of abuse.

Moreover, the bill is to encourage the development of small fields so as to provide an entry point into the oil and gas business by local companies, who have been excluded from participation since inception. Following this is the provision of the local content clause, which requires all projects and procurements to have local content. That would hopefully stimulate and encourage skills development and foster greater economic activities.

Another noteworthy feature of the bill is the commercialization of the present NNPC and autonomy of the other new institutions so that their running costs would be shouldered by their operations, for greater accountability, protection of the environment and participation of the host communities in all the activities in the entire value chain.

The research and development activity, which was relegated to the background, in the present dispensation would be made autonomous with the new name – the National Petroleum Research Centre.

IMPACT OF PIB ON UNIVERSITIES AND

RESEARCH INSTITUTES

Universities and Research Institutes have been severely under strain in Nigeria due to their dwindling budgetary allocations, which is their main, and to many, sole source of revenue. There is now a compelling need for the institutions to diversify their traditional focus on education and research and participate in other fund generating ventures, such as contract research.

The Niger Delta has been a potentially viable region for active relationships between the oil and gas industry operators and universities and research institutes. Although there has been some relationship existing, the intensity of the relationship is disappointingly low when compared with other oil and gas regions of the world.

Impact of the Industry On Research in other Oil Producing Countries

Brazilian and Saudi Arabian universities and research institutes have played major roles in developing breakthrough technologies and innovations as well as spawned spin-off companies through their research. Petrobras, the Brazilian National Oil Company, has the largest Applied Research Centre in the Southern Hemisphere. It undertakes research to achieve the mission of the National Oil Company, with more innovations and efficiency to bring energy to the people of Brazil. The Centre has more than 600 professionals holding Master's degrees and Doctorates, typical of a university system. Petrobras undertakes research and development, and networks with about 80 Brazilian research institutes and universities. It has developed exploration and production solutions, such as basin mapping and old-field revitalization processes.

One of the outcomes of research at Petrobras Applied Research Centre is the delivery of improved petroleum products to the people of Brazil. It also undertakes research for alternative sources of energy. Petrobras achieves all these because it operates in the Triple Helix Model framework and therefore, receives investments in modernization and technology capability.

In Saudi Arabia, higher education institutions now receive the lion's share of the country's appropriation for research

and development. Between 2006 and 2007, the number of research centres in Saudi Universities increased with the establishment of seven research centres of excellence in universities covering:

- Environment studies
- Medical genome science
- Oil refining and petrochemicals
- Renewable energy
- Materials engineering
- Dates and palm trees

In 2008, the National Science and Technology Plan (NSTP) implemented programmes and projects worth SR 7.9 billion (\$ 2.1 billion) for financing knowledge production activities.

King Fahd University of Petroleum and Minerals (KFUPM) is a technical university that operates in the Triple Helix framework. The university carries out research contracts leading to a number of patents of commercial value. It has developed several software packages for both in-house application and field development.

The benefits are measured in millions of dollars saved by using software to prevent borehole collapse during drilling, damage to well tubular, downhole equipment and surface facilities due to sand production.

The university has been of service to over 250 companies in various areas relevant to oil and gas industry. The companies have entrusted the University with their research and development and some of the companies have confidence in what the university does in its research activities as evidence by the following clients comments.

CLIENTS COMMENTS

"We have established the basic technology during the past five years. Now we would like to sum up the technical results of the joint research, and continue to Phase-II of the research program, started on 01 April 2001, which will continue till 31 March 2005. The study will be conducted in a 30 barrel per day demonstration plant in order to verify the HS-FCC process. This project has received much attention in both Saudi Arabia and Japan, and we look forward to working together to make it a success."

- Mr. Hajime Tomoi

Deputy General Manager
Technical Cooperation Department
Japan Petroleum Cooperation Centre.

"We would like to extend our appreciation to you and your team upon completion of Phase-I of the hole instability project conducted at KFUPM. The results of the project were very worthwhile. The work will help in solving real field problems and provide better understanding of the instability problem. It will reduce drilling costs when applied to the drilling program throughout the field. It will give greater confidence to planners when new drilling operations are planned or undertaken."

- Mr. Ahmed Al-Muraikhi
General Supervisor
Northern Area Reservoir Management
Saudi Aramco

"Study results on the carbonate reservoir formation (wettability and flow mechanism) have been applied to various oil fields not only in Gulf area but other regions. I hope to see the expansion of your research activities and look forward to having an opportunity to work with your Institute again in the near future."

- Mr. Kenji Ono
Technology Research Centre
Japan National Oil Corporation

"I am glad to hear from our technical team that the polyolefin catalyst research project is progressing well with encouraging results. Of course these achievements could not have been achieved without distinct dedication from the project team, and also very close cooperation demonstrated throughout the program. I certainly hope that the collaboration between SABIC and KFUPM will advance further in several areas of common interest and mutual benefits."

- Dr. Fahad Al-Khodairi
Acting Vice-President
Polymer Department
SABIC R&D

This lack of active relationship with the oil and gas industries in Nigeria is due mainly to the dominance of the International Oil Companies (IOCs) in the Nigerian oil

and gas industry who depend mostly on offshore research activities for their operations

Moreover, the weakness in our legal regulatory thrusts does not compel the operators in the industry to conform to the global best practices and this has led to the devastating impact of the industry on our environment and circumventing the policy of the federal government on local content.

The PIB has formulated the legal and regulatory framework that would guide the industry operations and establish institutions that would ensure their implementation. Confirmation of success of the implantation of the PIB framework rest on the research input of the Universities, Research Institutes and other research agencies, culminating in the development of baseline information data, analyzing the pollution load of the operational region and formulating mitigating strategies. The universities and research institutes would also carry out social research studies as they affect the communities and the industry workers.

THE TRIPLE HELIX FRAMEWORK FOR R&D

The institutions as provided in the draft bill have opportunities to fulfill their research mandate through:

- University-Industry collaborative research.
- Sponsorship of research projects
- Award of scholarships and fellowships for graduate studies with research components relevant to the industry.
- Development of research ecosystem/infrastructures of the universities that carry out research projects relevant to the industry.

Developing the Triple Helix framework will promote the research and development components in the bill.

RESEARCH & DEVELOPMENT AND THE NIGERIAN UNIVERSITIES

Nigerian Universities are predominantly "teaching

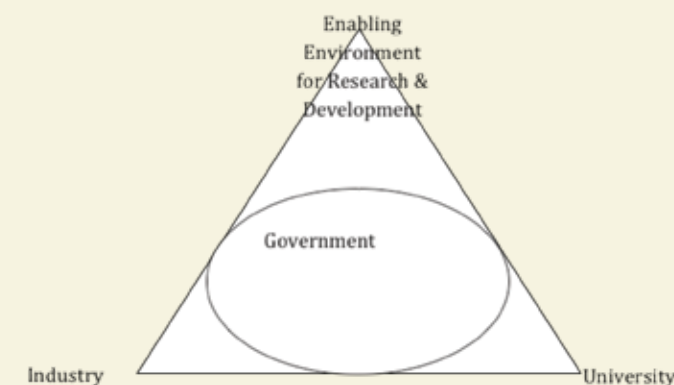


Fig. 1: The Triple Helix Model Framework

universities" with little basic research activities which are not relevant to industry. Without strong applied research, there will be no meaningful community service. Some of the reasons for the low research output by Nigerian universities are as follows:

- Empty laboratories
- Lack of equipment and facilities
- Unserviceable research equipment
- Curricula not aligned to development demands
- Irregular supply of electricity and water needed for research activities.
- Admitting more students than the approved carrying capacity of a university.

ENHANCING R&D IN NIGERIAN UNIVERSITIES POST-PIB

Research Advisory Board:

The Research Centres and Institutes that run academic



Fig. 2: Typical laboratory in Nigerian universities

programmes relevant to the Oil and Gas industry shall have Research Advisory Boards made up of active researchers in the university system and experts from the industry. The industry members of the Board will bring their experience in the industry to guide the direction of research for sustainable development of the university system and industry.

Collaborative research

There is the need for collaborative research projects between the university researchers and industry experts based on MoUs. The Industry will provide the necessary research funds and in some cases allow the use of industry laboratory facilities, while the university provides research capacity, human resources, for the generation of new knowledge.

Intellectual Property Right

- National IP policy:

Nigeria as a nation does not have a national IP policy to guide researchers and research sponsors in ownership of intellectual property of research outcomes. A national IP policy is necessary to give research the focus it deserves.

*** Institutional IP Policy**

There should be institutional IP policy that will protect the researcher and make provision for reward system for impactful research outcomes. Such policy will derive its strength from the national IP policy.

University-Industry Staff Exchange Programme

University-Industry staff exchange programme will go a long way to help the universities understand industry challenges so as to make the necessary research inputs to handle such challenges. Such exchange programmes will help to bridge the gaps between industry and university cultures/work ethics.

Enforcement of Nigerian Content Development Law

The Nigerian Content Development Law should be enforced to create the enabling environment for the university system to engage in industry relevant research to proffer solutions to industry challenges. This will also create jobs for the local industries by engaging in oil and gas activities that had hitherto, been reserved for foreign firms.

Mission Driven Commitment

Mission driven research should be the driving force for the actualization of all the objectives of the petroleum industry bill. University-Industry innovation links will leverage significant funds from industry to carry out research that will have transformative effects on the Nigerian Oil and Gas industry.

Strategic Research Plan

The universities in Nigeria should develop strategic research plans with substantial component of applied research relevant to the industry. Such strategic research plans shall be subjected to periodic review to ensure that their contents are in line with current national challenges.

Research Management Policy

A Research Management Policy is necessary for every Nigerian university to guide the conduct of research and ensure best practices in financial management.

Benefits of PIB on University Research and Development

As it is expected that a large pool of local operators would emerge by the passage and implementation of the bill, the universities and research institutes would help the local companies to innovate and grow through research and training of their workers. There would also be a compelling need to educate and produce highly skilled graduates by giving them the training needed in the industry. The post PIB environment would encourage challenging activities that would revolutionize areas of healthcare, technologies and social and infrastructural development in the oil and gas region and the country as a whole. Without doubt, this new impetus would surely lead to substantial revenues for the universities and research institutes and deliver them from the stranglehold of the yearly government budgetary dependence. Of course, the funding from the Petroleum Technology Development Fund (PTDF) would substantially improve and be better managed by the new arrangement for training of high quality skilled personnel for the industry.

CONCLUSION

Nigeria has not benefited much from the rich endowment of oil and gas due to many factors as highlighted in the preceding discussion, in addition to endemic corruption, security concerns, poor management and undue government interference.

A revolutionized oil and gas sector that is guided by a

functional legal and regulatory framework made possible through the PIB, promises to do a lot of good to the country.

However, it is sad to note that in the 2012 draft PIB, the National Petroleum Research Centre has been deleted, which goes to confirm that this nation has not realized the importance of research and development.

Moreover, giving research and development its deserved position in the sector would drive the expected economic growth and rapid infrastructural development as well as provide a stimulating research environment in the universities and research institutes.

The Triple Helix engagement fosters dynamic exchange of knowledge among the nation's universities, national funding (policy making) organizations, and local/global firms. The PIB should make provisions for effective and well-designed regulatory regimes and policies to drive the triple helix engagement which will in turn give rise to cutting edge research that will benefit the Nigerian Oil and Gas industry, and boost the nation's economy.

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SECURITY IN OIL PRODUCING REGIONS OF NIGERIA, POST PIB

BY DENNIS AMACHREE, *MON*
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GENERAL ELECTRIC GLOBAL OPERATIONS SUB-SAHARA AFRICA.



THE OIL AND GAS PRODUCING AREAS OF NIGERIA

The oil and gas producing areas of Nigeria basically cover the wetlands of the Niger Delta basin, extending from Ondo State in Western Nigeria to Cross River State on the Eastern boundary of Nigeria with the Cameroons.

The primary interest of colonial Britain was to trade in palm produce and other commodities that could be found in the area. At the discovery of crude oil, the British took advantage of the ignorance of the indigenes and the Nigerian government to exploit the “black gold” only to their benefit. In 1914, Her Majesty’s government enacted the Mineral Oil Ordinance No. 17. This was further amended to confer power to the British colonial administration to grant oil-prospecting licenses only to British companies. The amended law states:

“No lease or license shall be granted except to a British subject or to a British company registered in Great Britain or in a British colony having its principal place of business within Her Majesty’s dominion, the Chairman and the Managing Director (if any) and the majority of the other directors of which are British subjects.”

From the foregoing, it is very clear that the Nigerian people, and indeed the indigenes of the oil producing areas of the Niger Delta have no say in the oil that is mined in their backyards. Some nationalists like the great Zik of Africa

made some statements, admonishing the British for their selfishness in not considering the indigenes. But then, the colonial government tightened the screws by passing the Minerals Ordinance of 25th February 1946, which states that:

“The entire property in and control of all minerals, and mineral oil in, under or upon any lands in Nigeria, and of all rivers, streams and water courses throughout Nigeria is and shall be vested in the Crown.”

Other laws were to follow and after independence, the new Nigerian government followed the cue of the British government. Ownership of the crude oil was also vested in the Federal Republic of Nigeria. No one thought about the indigenes, whose environment was absorbing the impact of oil exploration. Different laws were promulgated and even in the 1999 Constitution the language was not different:

“...the entire property in and control of all minerals, mineral oils and natural gas, under or upon any land in Nigeria or in, under or upon the territorial waters and the Exclusive Economic Zone of Nigeria shall vest in the Government of the Federation and shall be managed in such manner as may be prescribed by the National Assembly.”

It was, with a sense of guilt that the governments of the day came up with the Willink’s Commission; the Niger Delta Basin Development Authority (NDBDA); Oil Minerals

ROOT CAUSES OF INSECURITY:

- All oil and gas laws since colonial days have not considered the indigenes of the region
- No opportunities and options for citizens
- Environmental degradation by operators
- Lack of supply chain security in the oil industry
- Lack of exclusion zone for extractive activities
- Endemic corruption and attitude of impunity

THREATS OVERVIEW – OIL PRODUCING REGIONS

- **SEA PIRACY**
 - Nigeria recorded the highest incidents of sea piracy, worldwide between 2003 – 2008
 - International Maritime Bureau reported 178 attacks of which 137 happened offshore Nigeria
- **MILITANCY IN NIGERIA’S NIGER DELTA**
 - Crude oil production dropped from 2.5mbd to 1.6mbd by 2009
 - Kidnap for Ransom
 - Nigeria now the 6th worldwide after Mexico, Brazil, Colombia, Venezuela & the Philippines

SECURITY THREATS TO THE OIL INDUSTRY:

- Increase in Crude Oil Theft – Illegal Bunkering
- Influx of Illegal Arms & Ammunition to the Niger Delta
- Increase in Kidnap for Ransom
 - 75% : Oil & Gas Workers
 - 15% : Politicians
 - 5% : Others
- Loss of Support Contractors; Production Outage & Union Withdrawal



• THE OIL PRODUCING REGION OF NIGERIA



• NIGER DELTA MILITANTS

Producing Areas Development Commission (OMPADEC); and lastly, the Niger Delta Development Commission (NDDC). To a large extent, the indigenes in their ignorance had always welcomed the international oil companies, until some enlightened citizens started questioning the rationale for neglect and despoliation of the environment in the oil producing areas of the Niger Delta.

THE ROOT CAUSES OF INSECURITY

The neglect of the oil producing areas was in different forms. No opportunities were given to the indigenes. The environment was degraded with oil spills and gas flares without consideration. Some of the oil pipelines have aged, corroded and were leaking into drinking water sources and

the rivers. These in turn affected the health of the people of the region, as well as destroying the ecosystem.

Indigenous reactions started when Isaac Adaka Boro felt that the people of the area deserve a fairer share of proceeds of the oil wealth. He went ahead to form the armed militia – the Niger Delta Volunteer Force, made up of his fellow Ijaw ethnic folks and declared the Niger Delta Republic on February 23, 1966. The insurgency was put down by the Federal Government, but that started the awareness streak for people of the Niger Delta.

THREATS OVERVIEW - OIL PRODUCING REGIONS

Sea Piracy – Sea piracy suddenly evolved from petty robbery on the sea, to a sophisticated venture. The pirates have suddenly retooled from canoes to motorized speed boats, armed with machine guns. According to the International Maritime Bureau (IMB), Nigeria recorded the highest incidents of sea piracy worldwide between 2003 – 2008. Of the 178 waterborne attacks recorded, 137 happened offshore Nigeria.

Militancy in the Niger Delta – Militant groups festered from 2006 with frequent attacks on oil production platforms and oil workers. This led to a drop in crude oil production from 2.5 million barrels per day to 1.6 million barrels by 2009. Many companies in the oil industry were forced to declare force majeure. Many expatriates refused to come and work for international oil companies in the Niger Delta. Militant groups emerged and allocated areas of operations amongst themselves and put the whole Niger Delta area, including the brown and blue waters of the Gulf of Guinea under siege.

Kidnap for Ransom – One of the tactics of the militant groups was to kidnap expatriate oil workers, to draw publicity to their plight. Victims were usually kept for a week or two and released. In some cases, the Stockholm syndrome was observed, where released hostages were actually propagating for the militants. No ransom was demanded or paid. Then suddenly one international oil company, contrary to security advise paid a huge ransom to get their expatriates released. That opened the floodgates and the militants now saw it as an avenue to make good money, to buy arms and ammunitions to pursue their cause. By 2007, Nigeria attained the unenviable position

of being the sixth on the worldwide Kidnap Index, after Mexico, Brazil, Colombia, Venezuela and the Philippines.

SECURITY THREATS TO THE OIL INDUSTRY

Consequently, crude oil theft or what is locally referred to as illegal bunkering hit a record high. There was proliferation of arms as the militants openly engaged the government security forces in shootouts. Sometimes the casualties were more on the government side. The militants were busy bartering arms and ammunition for crude oil.

Kidnapping for ransom became the order of the day. Members of the Joint Military Task Force (JTF) were now escorting supply boats, servicing offshore rigs and platforms. Oil workers became the target, as militants attacked offshore platforms scattered across Nigeria's continental shelf and exclusive economic zone. Oil companies suffered great losses as they grappled with the situation at hand.

The impact was tremendous. There was a general sense of insecurity. The government was busy fighting militants, which brought any meaningful development in the Niger Delta to a standstill. In 2007 alone, Nigeria recorded a production loss of about \$3billion. Oil companies providing security for their employees and supply chain spent another whooping sum of half a billion dollars. Other costs of repairing damaged rigs and bullet ridden marine vessels took another colossal sum.

SECURITY OUTLOOK – POST PIB

The objectives of the Petroleum Industry Bill are clear and laudable, but very vague when it comes to addressing the security issues of the oil and gas producing regions and its people. For instance, one of the objectives states that, the Bill will “Create a conducive business environment for petroleum operations.” How is that going to be done? “Enhance exploration and exploitation of petroleum resources in Nigeria for the benefit of the Nigerian people.” No mention of the indigenes of the oil producing areas, which are directly impacted.

The Presidential Amnesty Programme has succeeded in disarming, demobilizing, rehabilitation and re-integrating the militants. However, the environmental degradation and the lack of opportunities and development still persist. Is the Bill addressing these issues? If it is not, then the

security threats will continue to remain with us.

The oil industry, which is the bloodline of the Nigerian economy, also needs protection. In western countries, the area where drilling or extractive activities take place, both offshore and onshore are outlined by an Exclusion Zone. To protect oil industry operators, an “Enforceable Exclusion Zone” must be effected. This will give confidence to oil workers wherever they are working on the facilities. The porosity of these areas lends opportunity to fishermen and indeed militants, to violate the exclusion zone, to go aboard rigs and other marine platforms. The PIB needs to address these security issues.

THE NIGERIAN OIL AND GAS ECONOMY, POST PIB

DR JUDE O. AMAEFULE

SPE DISTINGUISHED MEMBER VICE CHAIRMAN/CEO
EMERALD ENERGY RESOURCES LIMITED

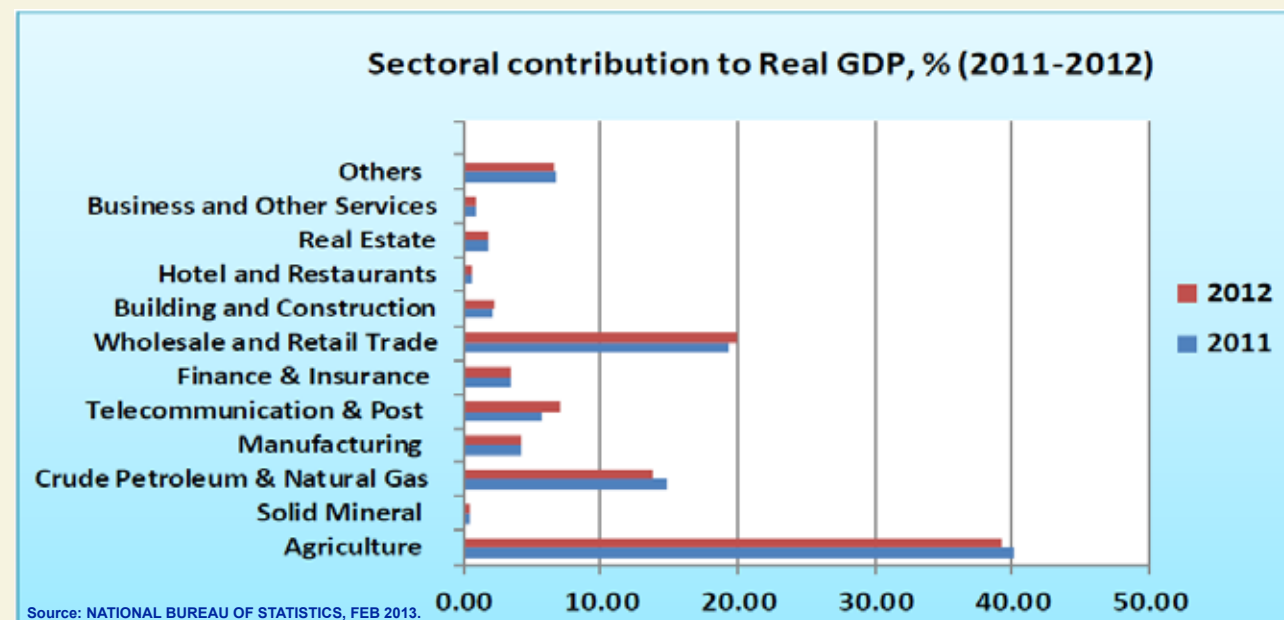


OUTLINE

- STARTLING STATISTICS – PRE PIB
- THE PIB – SOME EXPECTED EFFECTS AND CHANGES
- IMPACTS ON INNOVATION & SKILLS ACQUISITION
- RECOMMENDATIONS

STARTLING STATISTICS – PRE PIB

FROM 18.89 PER CENT IN THE FIRST QUARTER OF 2009, THE YEAR AFTER THE PIB WAS FIRST PRESENTED TO THE NATIONAL ASSEMBLY, OIL CONTRIBUTION TO GDP HAS FALLEN TO 14.7 PER CENT BY QUARTER ONE OF 2013.



• DR AMAEFULE'S PRESENTATION AT THE 2013 PORT HARCOURT PETROLEUM MINI-ROUNDTABLE NO. 3

ACCORDING TO THE NIGERIAN NATIONAL PETROLEUM CORPORATION (NNPC), OIL PRODUCTION WAS ESTIMATED AT 2.37 MILLION BARRELS PER DAY (MBPD) DURING THE FIRST HALF OF 2012, AS AGAINST 2.48MBPD PRODUCED IN THE FIRST HALF OF 2011. THE 4.4% DECLINE IN CRUDE PRODUCTION LEVELS WAS ATTRIBUTED TO DISRUPTIONS IN PRODUCTION DUE TO CASES OF OIL THEFT AND VANDALIZATION IN THE OIL PRODUCING AREAS.



UNEMPLOYMENT IN NIGERIA, PARTICULARLY IN THE FORM OF GRADUATE UNEMPLOYMENT, HAS BECOME PRONOUNCED IN THE LAST TWO DECADES DUE PRIMARILY TO

- UPSURGE IN THE OUTPUT FROM TERTIARY EDUCATION
- INELASTIC LABOUR ABSORPTIVE CAPACITY OF THE NIGERIAN LABOUR MARKET
- INADEQUATE AND RELEVANT SKILLS OF THE UNIVERSITY AND POLYTECHNIC GRADUATES.

THE PIB – SOME EXPECTED EFFECTS AND CHANGES

The PIB is expected to address the issue of transparency in the sector. The draft bill contains comprehensive reforms, including the redefinition of the roles of key executive and regulatory agencies and the national oil company; it also outlines a new fiscal regime aimed at increasing the government's take from operations under production sharing contracts".

** Excerpts from african development bank, 2012*

The provision of scholarships, bursaries and endowments for the training of Nigerians who will qualify as graduates, professionals, technicians and craftsmen in the fields of engineering, geology, science and management and other related fields in the petroleum industry via the petroleum technology development fund.

Petroleum technology development fund (already in existence)

IMPACTS ON INNOVATION & SKILLS ACQUISITION

EXPECTED TRENDS: COMPETENT PEOPLE WITH RELEVANT TECHNOLOGY

The encouragement of more technological advancement through research and development, which will enable industry to better understand complex reservoirs, reduce drilling costs, improve efficiency and enhance production.

Also wide spectrum of technical services to the innovative individuals will like wise emerge. These technical services will include among others common facilities for testing, tool room services, technology up-gradation, modernization, quality improvement etc.

EXPECTED TRENDS: INCREASE IN PATENT OWNERSHIP AND INTELLECTUAL PROPERTY

In a bid to protect innovations in a transparent and open industry and like wise security of investments, set ups of intellectual property facilitation cells will evolve which will provide a range of intellectual property related services, such as prior art search, patent landscape and interface for technology transfer.

This will greatly stimulate industrial research within not only the IOC's but also among indigenous and startup oil and gas related industries.

EXPECTED TRENDS: READILY RECOGNIZED OIL AND GAS INDUSTRY NEEDS

The ever evolving Oil and Gas industry needs through the PIB will be readily identified. This will guide not just students but technicians and professional therefore contributing to employment .

Also stimulating entrepreneurship/enterprise development via advancing entrepreneurship education will emerge as businesses will spring up owing to the PIB's local content accommodation.

EXPECTED TRENDS: GROWTH OF INNOVATION AND SKILLS ACQUISITION

Larger Expected Inflow Of Capital Will Stimulate Demand For Technology-driven Services Provided By Indigenous Service Contractors I-e Dorman Long; Nigerdock & Petan Service Groups etc.

Larger capital spending will increase the inflow of revenue to the Nigerian Content Board, ETF, PTDF, which , if judiciously used would impact positively on the growth of innovation and skills acquisition to meet industry needs.

RECOMMENDATIONS (1)

CLOSE SKILL GAP IN OIL AND GAS EDUCATION

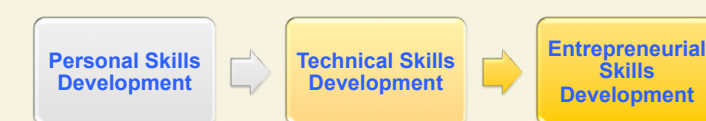


A **TECHNOPRENUER** is an entrepreneur who is technology savvy, creative, innovative, dynamic, dares to be different and take the unexplored path, and very passionate about their work.

** Technology and entrepreneurial skills are driving many economies to prosperity.*

RECOMMENDATIONS (2)

SKILLS UPGRADE FRAMEWORK



CASE STUDY - SINGAPORE:

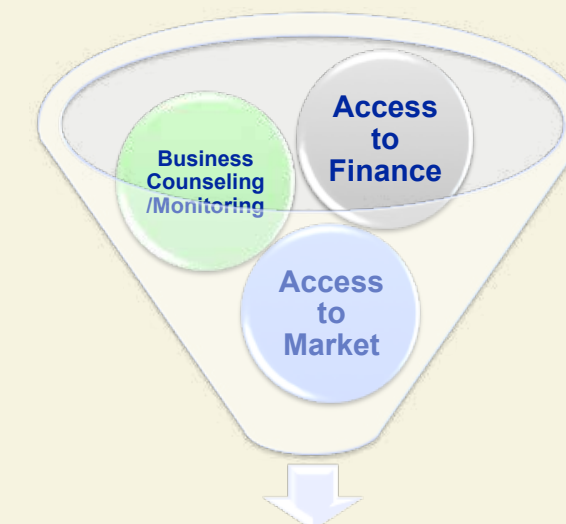
The Singapore Workforce Skills Qualifications (WSQ) is a national credentialing system, developed and managed by the Singapore Workforce Development Agency (WDA). The WSQ system trains, develops, assesses and recognizes individuals for competencies that companies are looking for.

Based on national standards developed by the Workforce Development Authority (WDA) in collaboration with various industries, WSQ comprises industry sectoral frameworks which serve to:

** Enhance labour market flexibility and skills portability in growing industry with high demand for skilled workers and professionals.*

RECOMMENDATIONS (3)

TRANSLATE INNOVATIONS INTO ECONOMIC VENTURES



VIALE MICRO, SMALL AND MEDIUM OIL AND GAS RELATED ENTERPRISES

ACCESS TO FINANCE:

The constrain on finance can be addressed by a Credit Rating Scheme and Credit Guarantee Scheme for the sub-sector. This will make financing the sub sector attractive to banks and other investors.

BUSINESS COUNSELING:

An Oil & Gas Support/Employment Service should be in place to help the recipient/beneficiary

- Reflect on his/her business idea
- Explore the financial, economic, legal and cultural aspects of the business environment and

iii. Reach a decision and/or form a business plan.

ACCESS TO MARKET:

The competitiveness of any Enterprise/Skill depends on how efficient all the resources in the process of production are utilized and how efficient these are marketed via adequate Regulations of the Oil & Gas Market Industry.

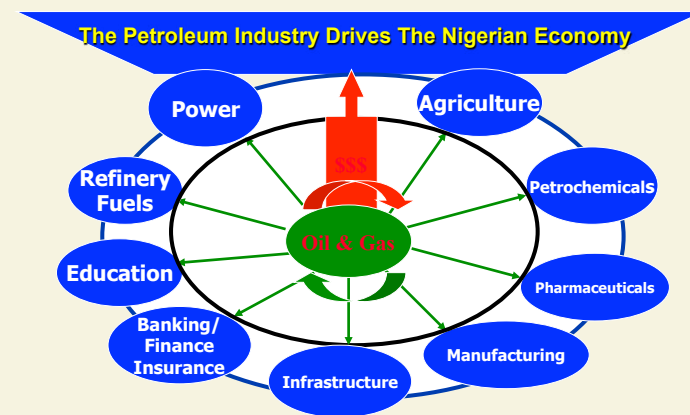
RECOMMENDATIONS (4)

POST PIB: DIASPORA-BASED TECHNOLOGY EXPERTS



Nigeria's strength is not only in its resource endowment but also its human capital. Nigeria is a leader in the continent when it comes to qualified medical officers, engineers, and other professionals in many fields. For example, according to United Nations statistics, there are 3.25 million Nigerians living and working in North America today. Of this, 115,000 are medical professionals; 174,000 are IT professionals, 87,000 are pharmacists, 49,500 are engineers and 250,000 are legal, financial, real estate and business related professionals. This is a resource base which the country can harness, in addition to the millions of professions still in the country.

IN CONCLUSION



BACK UP

PTDF

PURPOSE OF THE DEVELOPMENT FUND

1. The Development Fund shall be used for the purposes of training Nigerians to qualify as graduates, professionals, technicians and craftsmen in the fields of engineering, geology, science and management and other related fields in the petroleum industry and in particular, and without prejudice to the generality of the foregoing, the funds shall be utilised to -

- provide scholarships and bursaries, wholly or partially in universities, institutions and in petroleum undertakings in Nigeria or abroad;
- maintain, supplement, or subsidise such training or education as specified in this subsection;
- make suitable endowments to faculties in Nigerian universities, colleges, or institutions as may be approved by the Board;
- initiate, design and implement effective indigenous research and capacity development for Nigeria's petroleum industry;
- liaise with research centres in Nigeria and abroad on the adaptation of technology and innovations appropriate for the needs of the Nigerian petroleum industry;
- use existing human resources development facilities in Nigeria for purposes of expanding manpower development programme in the petroleum industry;
- where applicable, support skill acquisition programmes aimed at enhancing employment in the petroleum industry in Nigeria;
- periodically compute, evaluate and update the basic needs of Nigeria's petroleum industry in terms of skills, expertise and know-how;
- enhance and develop infrastructure in tertiary institutions that provide courses of study relevant to the petroleum industry;
- make available suitable books and training equipment in the Nigerian tertiary institutions;
- sponsor visits to oilfields, refineries and petrochemical plants for the purpose of training;
- arrange attachments of trainees and other personnel to establishments connected with the development of the petroleum industry;
- sponsor or finance participation of Nigerians in petroleum related seminars, workshops and conferences within or outside Nigeria; and 49
- engage in any other activity incidental to the Development Fund's mandate as may be approved from time to time by the Board.

IMPACT ON LOCS & LOSCS AND THEIR INVESTMENTS

By EMEKA C. ENE, CHAIRMAN PETAN



HIGHLIGHTS:

Ene's paper started with a poser on what constitutes best judgement assumptions for a desirable post-pib landscape. He went on to identify:

- Streamlined Regulatory Framework – Upstream vs. Downstream well defined.
- Significant Investment incentives for Gas Development.
- Local-Content Firmly embedded in Post-PIB environment
- FIDs for major Field Developments
- Evergreen “basket” of oil blocks/Marginals for Annual Bid-rounds
- Production-driven Fiscal incentives for Shallow and Deep Water
- Fiscal terms stable and predictable.

POLITICALECONOMY&ENVIRONMENTAL DEGRADATION RESULTING FROM OIL THEFT

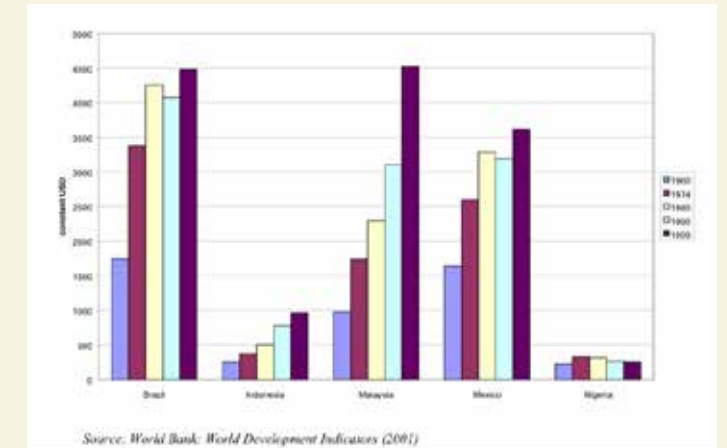
He identified Key Drivers for a desired Post-PIB economic environment as: Energy Utilization, Entrepreneurship and development of Economic Clusters

On Energy Utilization, the paper posited that independent producers can make a difference in a post PIB era because:

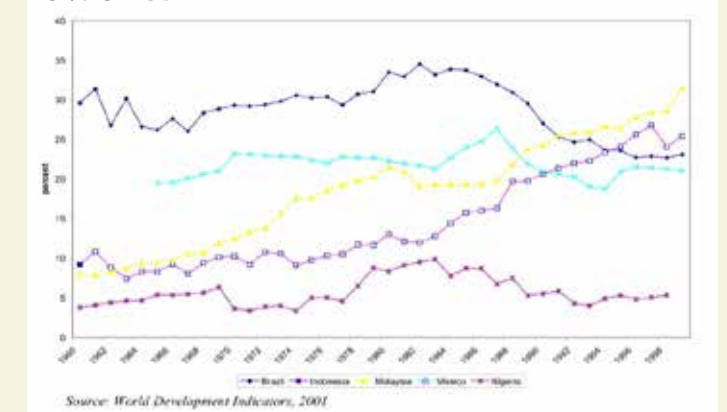
Independent Oil Producers can potentially grow reserves faster than the Majors. A good example is Seplat.

Energy Utilization is increased through integrated energy projects as illustrated by Niger Delta Petroleum Resources (NDPR), Energia Limited and Frontier Oil.

REALITY CHECK#1: (1960~1999+) LIMITED GDP IMPACT FROM OIL & GAS ACTIVITY IN NIGERIA



REALITY CHECK#2: (1960~1999+) LITTLE GROWTH IN NIGERIA'S MANUFACTURING OUTPUT AS % OF GDP



LEAP STRATEGY!

- Oil & Gas Entrepreneurs can deliver the Short and Medium term investments needed to reverse the slide in reserves in the post PIB environment.
- 71% of producing marginal fields are led by entrepreneurs, against 30% by technocrats.
- The desired PIB will (should) create the regulatory framework to stimulate entrepreneurship.

In-country manufacturing is a driver of sustainable economic growth

- Manufacturing output has been flat in Nigeria over last 50 years and has not changed with the Oil & Gas Industry.
- GDP growth correlates with In-Country Manufacturing in Brazil, Indonesia and Malaysia
- Therefore, without a strong internal Engineering and manufacturing base, real socio-economic well being in the Niger Delta cannot be sustained.

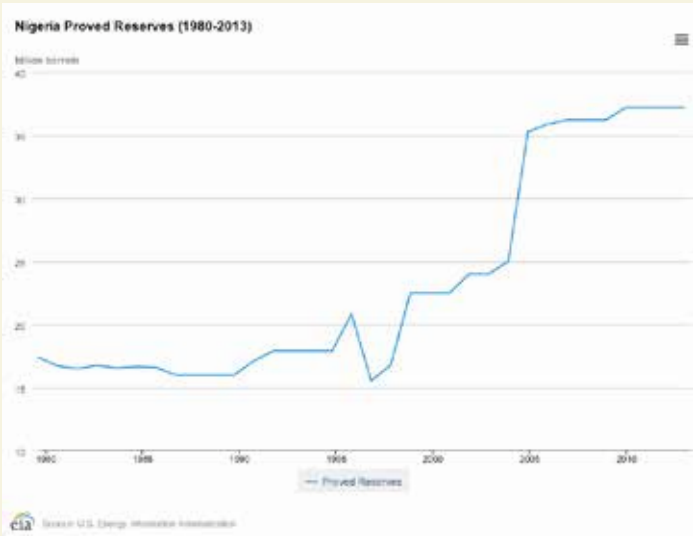
PETAN IN NUMBERS

- **60** Oil Service Companies
- Over **250** Technical Services
- Employment: **20,000+**
- Collateral employment: **80,000+**

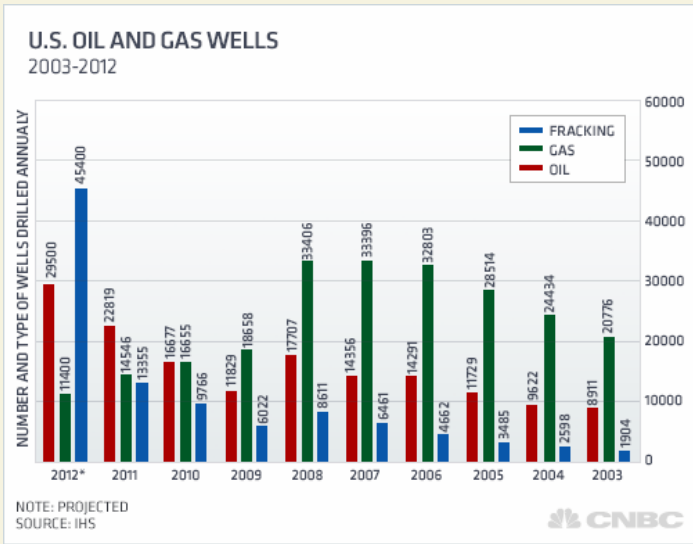


ILEGAL OIL REFINERIES IN THE NIGER-DELTA, 2012

REALITY CHECK #3: NIGERIA'S RESERVES ARE NOT GROWING.



THE U.S WILL BE A NET EXPORTER OF OIL BY 2017



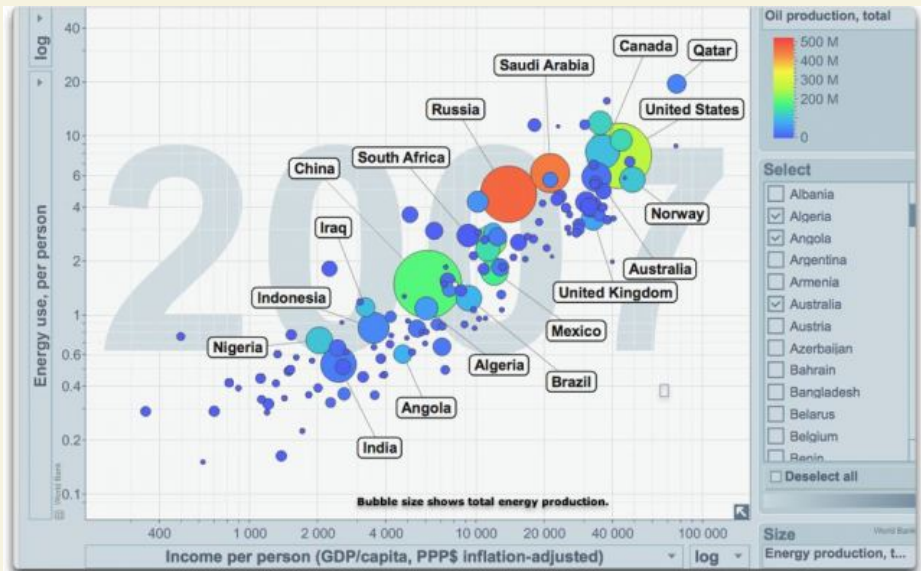
ECONOMIC CLUSTERS : IMPACT OF THE NIGER-DELTA ENERGY CORRIDOR

- Energy Processing Clusters will accelerate Niger-Delta development through in-country processing.
- LOC/LOSC Investments in independent production within the corridor is tied to Gas & Petrochemical facilities and manufacturing.

NIGERIA: PARADOX OF WASTED POTENTIAL

ECONOMIC INDEX	NIGERIA	BRAZIL
Population	170 M	193 M
Oil production	2.458 million bbl/day	2.18 M Bbl/Day
Gas Production	63.6 M cu m3/Day	69 M cum ³ /Day
Gas Consumption	7.216 Billion cu m	25 Billion cu m
Electricity Generation	18.14 B kWh (< 5% of Brazil)	505,684 GWh
GDP (PPP)	413.4 B\$	2.3 T\$
GDP Growth (2012)	6.5%	5.5%

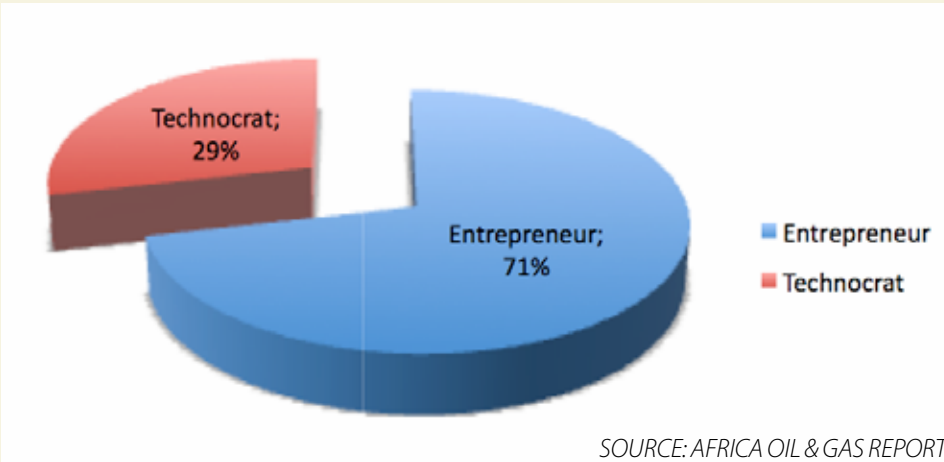
SOURCES: WORLD BANK, BRAZIL ANP MINISTRY OF MINES & ENERGY, BLOOMBERG



PER CAPITA ENERGY USE VS. INCOME PER PERSON.

(Size of the individual bubbles shows total energy production by that country. Color of bubbles shows total oil production by that country).

PRODUCING MARGINAL FIELDS: CEO EXPERIENCE



SOURCE: AFRICA OIL & GAS REPORT

PRODUCTION & OPERATIONS



DRILLING & COMPLETIONS



PROJECTS, FACILITIES & CONSTRUCTION



SUMMARY:

- Energy Utilization needs to grow through LOC production.
- Entrepreneurship is key to sustain short-term investment.
- Economic Clusters provide the integration required for infrastructure development.

NIGERIAN CONTENT, POST PIB.

By ENGR. E.C. NWAPA (FNSE)
EXECUTIVE SECRETARY, NCDMB



LOCAL CONTENT DEFINED

The Nigerian Oil and Gas Industry Content Development (NOGICD) Act 2010 defines Local Content as “The quantum of composite value added to or created in the Nigerian economy by a systematic development of capacity and capabilities through the deliberate utilization of Nigerian human, material resources and services in the Nigerian Oil and Gas industry”.

Objectives of Local Content include:

- To increase contribution of Oil and Gas sector to GDP through increased value addition in-country
- To foster technology acquisition
- To promote participation of indigenous companies in the Oil and Gas sector.
- To generate employment for Nigerians in all job categories
- To maximise utilization of Nigerian made goods, human resources and services in the Oil and Gas value chain.

- To establish, maintain and operate the Joint Qualification System (NJQS) in conjunction with industry stakeholders.
- To monitor Nigerian content compliance by operators and service providers. This will be in terms of cumulative spending, employment created and sources of local goods & services materials utilized on projects and operations.

PETROLEUM INDUSTRY BILL:

The Petroleum Industry Bill was conceived to create a regulatory framework that will make the governance of Nigeria’s Oil and Gas sector more transparent and bring more investment and transparency into the sector, both from International Oil Companies (IOCs) and National Oil Companies.

The Petroleum Industry Bill (PIB) has the following core objectives:

- To create conducive business environment for petroleum operations
- To create efficient and effective regulatory agencies
- To establish progressive fiscal framework that encourages further investment in the petroleum industry
- To promote development of Nigerian content in the petroleum industry
- Mandatory provision for infrastructure development,

IMPLEMENTATION

Local Content implementation in Nigeria is backed by the Nigerian Oil and Gas Industry Content Development Act (NOGICD) 2010. The Act seeks to increase indigenous participation in the Oil and Gas industry by prescribing minimum thresholds for the use of local services and materials and to promote transfer of technology and skills to Nigerian staff and labour in the Oil and Gas industry.

The Act established Nigerian Content Development and Monitoring Board (NCDMB). The Act also empowers the Honourable Minister of Petroleum Resources to make regulations for effective implementation of the Nigerian content policy.

employment of indigenes, purchase of goods from indigenes, creation & support of local businesses, training and employment.

- To promote transparency and openness
- To provide commercially oriented and profit driven Oil and Gas entities.

LOCAL CONTENT POST PIB

• The PIB has clearly enunciated the role of Local Content in the Oil and Gas industry and stressed the role of NCDMB as the sole agency of government on Nigerian content implementation.

• The imperatives for post-PIB investment is that Nigerian Content implementation must translate to establishment of critical facilities and infrastructure required to deliver quality E&P services, increased local supplier industry competitiveness, to enhance domiciliation of services and professional development framework to meet the human capital needs of the industry.

• To maximise the benefits of in-country value creation from anticipated investment in E&P activities.

• The Board strongly believes that mandating Capacity Development Initiatives on the back of new investments in E&P post-PIB shall stimulate the much needed legacy infrastructure and facilities for rapid industrialisation and mass employment generation for Nigerians.

• The Federal Government has taken a step to ensure that communities where oil is extracted benefit directly from the extractive activities. This is well encapsulated in the PIB before the National Assembly

• Massive investment flow will be witnessed when PIB is passed and those investments will yield revenue for Nigeria.

• Efforts are been made to develop Nigerian content on the journey to a post-PIB oil industry for the benefit of the local economy and Nigerians in general.

• We have had a three-year head-start in the implementation of the Local Content Act which has enabled us create some capacities in Nigeria such that as the PIB is being passed and investments are

coming, we would then have jobs arising from the

investments being executed locally.

- Nigerian Content & Local Social Responsibility: No approval for FDP without an approved Nigerian Content plan (NC) for projects exceeding \$10 million
 - NC plan to include purchase of Nigerian goods, procurement guidelines, employment of Nigerians, training, education, research & development.

CAPACITY DEVELOPMENT

- INFRASTRUCTURE AND FACILITIES:

Over \$2bn has been invested in the last 3 years for infrastructure development and upgrade of fabrication yards such as fabrication of complete production platforms at Niger Dock/Dorman Long, fabrication of Christmas trees//Valves at Globestar and facility upgrade at Ladol. These facilities attract not just vessels operating within Nigeria but also meets the repairs and maintenance needs of vessels operating in West Africa. These investments by local service companies is in recognition of the fact that the Board ensures local capacity are fully exhausted in all tenders emanating from operating companies.

- TRAINING AND EMPLOYMENT:

• Direct training and attachments on Environmental Remediation is been sponsored by NCDMB. The program will involve 1,000 youths from the Oil producing communities and they will be exposed to full cycle of environmental management.

• On the Job trainings (OJTs) provide an opportunity for our youths to be absorbed in the manufacturing, fabrication, engineering and procurement activities. About 5,000 youths have participated in these programs led by IOCs, service companies and NCDMB.

• The recently introduced Nigerian Content Employment Initiative (NCEI) will ensure that training expenditure is directly linked to Industry skill requirements. NCDMB is working in partnership with OGTAN and Petrofac to establish Training Centers of excellence that will meet the requirements of the industry in areas such as field exploration, construction of Oil and Gas production facilities and Oil & Gas production.

THRUST OF THE NOGIC ACT 2010

Nigerian Content aspiration derived from the thrust of the NOGIC Act are focused on ensuring that companies benefitting from our natural resources also contribute to economic development of Nigeria.

1

Maximize utilization of Nigerian made goods

- Develop local capacity in key areas such as manufacturing fabrication, engineering etc
- Promote indigenous ownership of assets and utilization of indigenous assets in oil and gas operations.

2

Maximize utilization of Nigerian human resources

- Develop indigenous skills pool across oil and gas value chain
- Provides mandatory training requirements on the back of projects
- Creates JQS to manage and track available skills

3

Link the oil and gas industry with other sectors of the Economy

- Promote establishment of support industries that will sustain oil and gas industry operations
- Enhance multiplier effect of oil and gas investments in economy

4

Focus on community participation in the supply chain

- Develop pool of competitive supply chain rooted in oil bearing communities.
- Create customized training and sustainable employment opportunities
- Structured awareness and enlightenment campaigns.

5

Foster institutional collaboration

- Institutionalize inter-agency collaboration on local content development.
- Integrate NCDMB into planning and contracting process to ensure Nigerian Content counts.
- Dedicated NCDF for capacity building

VISION, MISSION AND MEDIUM TERM TARGETS OUTCOME OF STAKEHOLDER ENGAGEMENTS, BOARD RETREAT AND COLLABORATION

- Retain \$10 billion out of \$20 billion average annual Industry spend.
- Create over 30,000 direct employment and training opportunities.
- Establish 3 to 4 new pipe mills to service industry demands
- Develop 1 or 2 dockyards and maximize utilization of existing shipyards.
- Transformation of ownership profile of marine assets supporting industry.
- Integration of indigenes and businesses residing in the

Oil producing areas.

- Capture over 50 - 70% of Banking services, Insurance risk placements and Legal services.

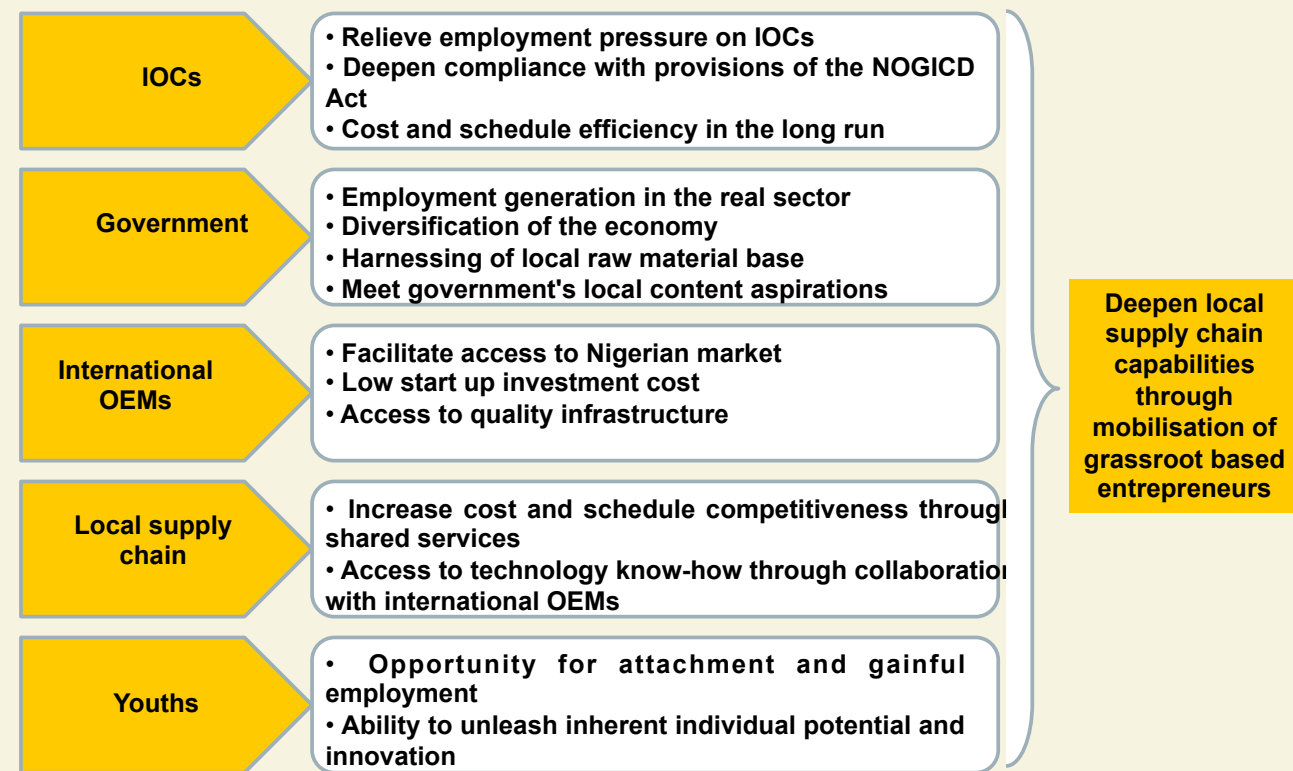
VISION STATEMENT

To be the instrument for the industrialization of nigeria

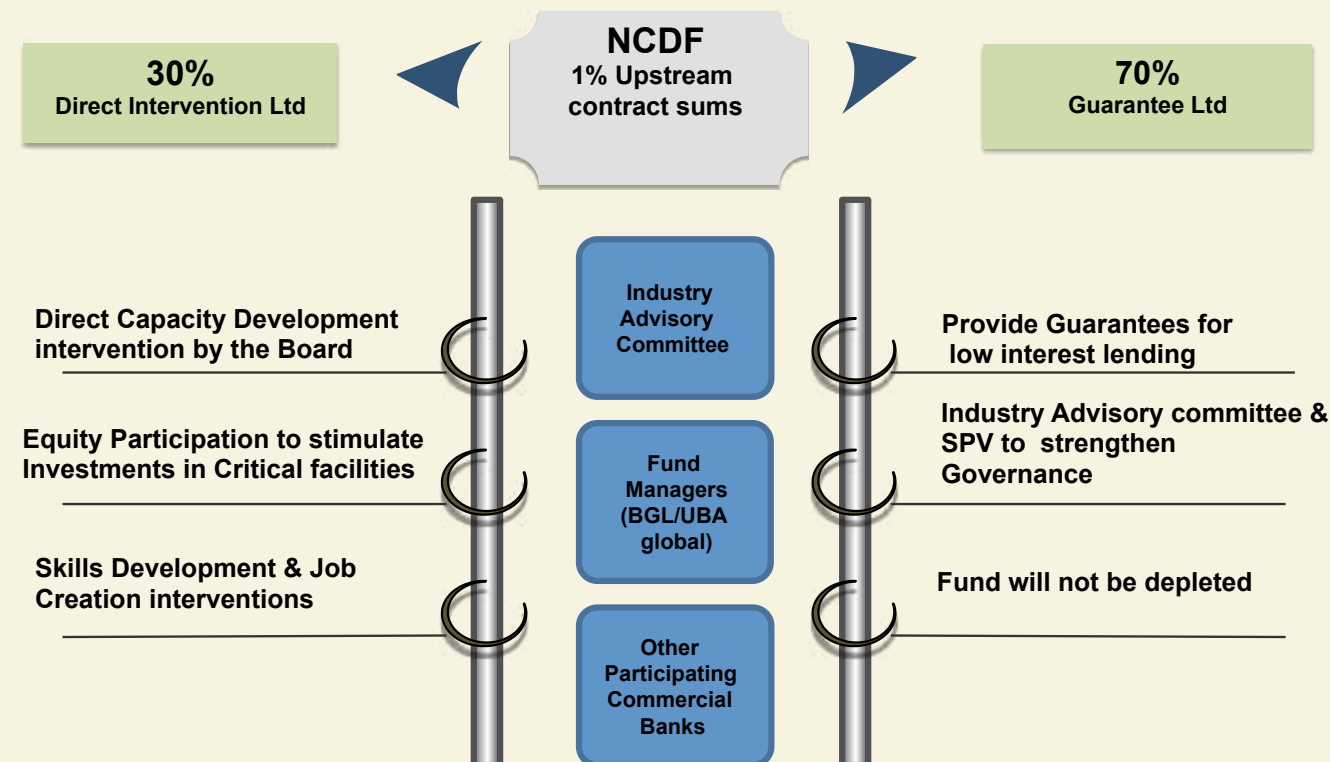
MISSION STATEMENT

To promote the development and utilization of in-country capabilities for industrialization of Nigeria through the effective implementation of the Nigerian Content ACT.

NIGERIAN OIL AND GAS INDUSTRIAL PARK SCHEME (NOGIPS)



NIGERIAN CONTENT DEVELOPMENT FUND MODEL(CLAUSE 104 OF THE ACT) NCDF IMPLEMENTATION



- MANUFACTURING:

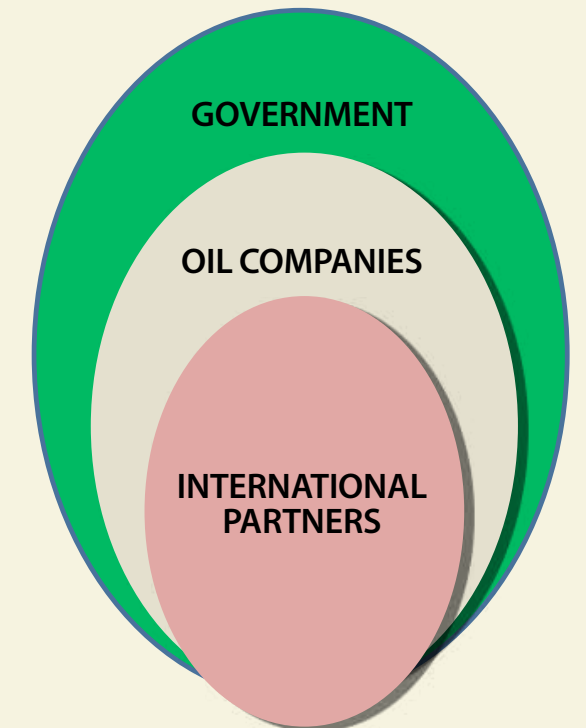
The participation of OEM representatives in equipment component manufacture has elevated Nigerian involvement in equipment supply to the level where components and spare parts sourced from Nigeria form part of equipment and packages used in the Nigerian Oil and Gas industry. The Equipment component manufacturing initiative is intended to gradually increase value added activities from component and spare parts manufacturing and assembly to equipment design and raw material processing, thereby increasing local research development and innovation.

- ASSET OWNERSHIP

The implementation of a policy for local companies to invest in ownership of asset has not just increased the number of assets owned by Nigerians but it has also increased manning of marine vessels and rigs by Nigerians. The Nigerian content requirement for utilisation of made in Nigerian goods and Nigerian human capital has been the pillar for increased domiciliation of value added activities in-country such as manufacture of line pipes, valves assembly, Oil Country Tubular Goods (OCTG) threading etc.

LOCAL CONTENT PROVISIONS IN THE PETROLEUM INDUSTRY BILL (PIB)

- * If the Nigerian Local Content law is not complied with, The Petroleum Inspectorate have the power to revoke a license or permit.
- * Indigenous companies in the petroleum industry must be given exclusive consideration in the award of contracts in the Oil and Gas industry
- * International Oil companies (IOCs) must submit a detailed programme for recruitment and training of Nigerians.



CONCLUSION

The Petroleum Industry Bill (PIB), which is currently before the National Assembly, is a reform legislation aimed at refining the country's scattered and obsolete petroleum laws. The idea is to come up with a single Act with clear rules of operations which will be in tandem with international best practices.

Management and allocation of petroleum resources will be in accordance with the principles of good governance, transparency, Local Content development and Community relations. Post PIB Capacity Building Initiatives of the Board will continue to develop the nation's oil and gas industry and provide the required linkages to other sectors of the economy.

EXCERPTS FROM THE EGBOGAH MODEL

DIVIDENDS TO HOST AND IMPACTED COMMUNITIES: THE EGBOGAH MODEL



1. THE OBJECTIVES ARE TO:

- Give the impacted communities a stake in the ownership of petroleum assets in Nigeria through payment of dividends;
- Enhance the sustainable social, cultural and economic well-being of communities impacted by the oil and gas industry activities.

2. DEFINITIONS

- A lessee, licensee, or operator is any oil or gas company in the Federal Republic of Nigeria that owns or operates an asset or a facility as defined in subsections 2(b) and 2(c).
- Petroleum assets include any facility, parcel of acreage of petroleum prospecting license and petroleum mining lease which impacts a community as determined in subsections 2d.
- Facility shall include any well, gathering lines, pipelines, crude oil tank farms, flow stations, production platforms, gas plants, production terminals, floating production storage and offloading (FPSO) systems, floating storage and offloading (FSO) systems, production terminals, refineries, LNG plants and export systems but excludes oil product or gas filling or distribution stations.
- Impacted community shall be defined as follows:
 - For existing operations or projects where depending on the applicable regulatory provision, environmental impact assessment (EIA) or environmental and social impact assessment (ESIA) is not available and for new projects which will be implemented within existing operations:

a. Impacted community shall mean a community of persons which is already recognized and working with the licensee, lessee or operator as host community. Or

ii. For new projects, new operations or new acreages which are not within existing operations and where depending on the applicable regulatory provision, environmental impact assessment (EIA) or environmental and social impact assessment (ESIA) is available:

a. Impacted community shall mean a community that has been specifically identified in an environmental and social impact assessment or environmental impact assessment required under this act as having the potential to be significantly impacted negatively or positively by petroleum operations.

iii. Communities impacted by existing crude oil, oil product or gas pipelines extending beyond the operational areas of the lessee or licensee or operator shall be determined as follows. Provided such a community has not been identified as impacted pursuant to subsections 2 (d) (i) or 2 (d) (ii)

a. With respect to onshore pipelines, impacted communities shall be the communities located 1 km on either side of the pipeline corridor. Provided the lines are divided in parts according to the length of pipelines within an impacted community

b. With respect to offshore pipelines, impacted communities shall be the communities that are closest to the salt water shoreline of the various coastal states

e. Revisions shall be made to the list of impacted communities according to subsections 8 (b)(vi) and 11(a), (b) and (c)

f. Gathering lines shall mean crude oil or condensate or gas or oil product lines of 6 inches or 15 cm in diameter

g. Pipelines shall include; small pipelines with diameters greater than 6 inches or 15 cm but less than or equal to 12 inches or 30 cm and large pipelines of diameter greater than 12 inches or 30 cm.

h. Well shall include oil and gas producing wells as well as oil and gas injection wells

i. Dividends under this section means compensation payments for impact of petroleum operations on the impacted communities and their members and are therefore not related to any ownership of shares.

j. The salt water shoreline shall be based on the high water mark

k. Any reference to offshore in this section shall refer to the continental shelf, which for the purposes of this section shall extend to the 200 meter water depth.

3. DIVIDEND SOURCES

Any licensee or lessee or operator shall contribute dividends to the impacted communities based on the impact value of the acreage and assets used for petroleum operations determined as follows and summarized in table - a:

- U.S \$ 2,000 per square kilometer in onshore and offshore for a parcel included in a petroleum prospecting license, and prior to the conversion pursuant to section 191 of this act included in an oil prospecting license;
- U.S \$ 60,000 per square kilometer in onshore and US \$100,000 per square kilometer in offshore for a parcel included in a petroleum mining lease, and prior to the conversion pursuant to section 191 of this act based on the parcels covering the reasonable surface extension of the oil or gas fields in production or development;
- US \$ 50,000 for each producing onshore well, including wells that are injecting, but excluding wells which have been suspended or are abandoned or are off production;
- U.S \$ 300,000 for each producing offshore well, including wells that are injecting, but excluding wells which have been suspended or are abandoned or are

off production;

e. U.S \$ 4000 per kilometer of each flowing gathering line or flowing small diameter pipeline for petroleum or petroleum products up to and including a diameter of 15 cm (6 inch);

f. U.S \$ 10000 per kilometer of each flowing pipeline over 15 cm (6 inch) diameter but up to and including a diameter of 30 cm (12 inch);

g. U.S \$ 40000 per kilometer for each flowing pipeline for petroleum and petroleum products over 30 centimeter (12 inch) diameter;

h. U.S \$ 1,000,000 per square kilometer area occupied by any tank farm, loading facility, staging area, warehouse or similar facilities;

i. U.S \$ 50 per barrel equivalent total facility name plate capacity, based on 6000 cubic feet of gas per barrel of oil, for every:

ii. Operating field production facility, FPSO, or other upstream facilities that handle or process petroleum, and

iii. Operating refineries or other midstream facilities that handle crude oil or condensates or both, located onshore or on floating or fixed offshore platforms or subsea facilities, other than facilities pursuant to paragraph (j) and (k) of this subsection;

j. US \$ 10 per mcf name plate capacity for every operating gas conditioning plant, gas processing plant, natural liquids extraction plant, LNG plant, GTL plant or other midstream facilities that handle natural gas; and

k. U.S \$ 10 per barrel based on the reasonable maximum daily loading capacity in barrels for operating onshore export terminals or offshore export terminals loading buoys.

l. The amounts pursuant to this subsection shall be adjusted:

a. With the adjustment factor of section 431 of this act; and

b. Occasionally pursuant to the applicable regulations with a view of ensuring that the impact values reasonably reflect the impacts on local communities and their members, taking into consideration:

- i. The replacement value of the assets,
- ii. Typical levels of pollution caused by the assets,
- iii. Typical levels interference caused by the assets or related to the acreage,
- iv. The strategic value of the assets to nigerians in terms of establishing a secure supply of petroleum products for markets in nigeria, of natural gas for power generation and for industrial use and of crude oil and condensates for refining operations.

4. DIVIDEND DISTRIBUTION MECHANISM

- a. For onshore and offshore petroleum operations on the continental shelf, the dividends shall be paid to the impacted communities as for any petroleum asset as defined in subsection 2 (b); based on the impact values described in subsection 3 by the lessee, licensee or operator as defined in subsection 2 (a) using the process described in this subsection
- b. Payments of dividends can only be made to the bank account of the community trust established for this purpose by the impacted communities pursuant to applicable regulations; and
- c. Such regulations shall set out among other issues:
 - i. The membership of the community trust, which shall include as a minimum all nigerian citizens of 18 years and older residing in such communities subject to such residency requirements as may be provided for,
 - ii. The election and responsibilities of the boards and appointment of the treasurer of the community trust,
 - iii. Auditing and control procedures of dividends received and distributed by the community trust, and
- d. The possibility for community trusts to create jointly regional trusts to which a percentage of the dividends can be transferred for joint planning and implementation of community projects.

5. PAYMENT SCHEDULE

- a. Licensees, lessees or operators shall inform the treasurer of the community trusts, the amount of their dividends on the first monday of february of the calendar year following the year of commencement of this act and subsequent

calendar years and shall pay the respective amounts on the first monday of march each year.

- b. The amount shall be calculated on the basis of petroleum asset in existence on december 31 of the previous year

c. The community added newly on the list of impacted communities shall commence receiving benefit in respect of the petroleum asset located in it, in the year after the year of inclusion in the list.

- d. Dividend calculation shall not include wells, pipelines, flow stations, platforms, plants, terminals, tank farm or any other facility which are abandoned or suspended

6. DIVIDEND MANAGEMENT

The manner in which distributions of dividends shall be used is the decision of the community citizens but shall be managed and implemented by the community or regional trust board. The board should seek professional advice for the dedication of the budgets over a certain level as may be determined it. Dividend distribution shall be set up following the process described in subsection 8 based on the following options:

- a. The dividends may be distributed equally to all members; or
- b. The dividends may be distributed in part equally to all members and for remainder it may be used for:
 - i. Investments in shares or financial securities,
 - ii. Creation of community corporations for purposes determined by the board, or
 - iii. Such other activities that benefit the members of the community trusts or regional trusts.

DIRECT IMPACT OF PIB ON OIL PRODUCING COMMUNITIES

- AN OVERVIEW

By DR EME EKEKWE



The Petroleum Industry Bill (PIB) promises far-reaching changes in the Nigerian oil and gas industry. While it will have some positive impact on the oil-bearing communities, it will not solve some of the old problems that plague industry-community relations. These include problems of resource ownership, environmental protection and the infrastructural development. In fact, on the issue of resource ownership, the PIB is not at all forward looking. The main positive innovation in it is the provision for petroleum host community fund (PHCF). Sadly, this in turn begs several questions. The paper looks at some of the strategies by which the fund could be managed to the greatest benefit of the communities, and recommends that it should operate as a source of annual direct payment of dividends to community members.

I. INTRODUCTION:

Samuel Beckett's work, Waiting for Godot, could just as well have been titled "Waiting for the Petroleum Industry Bill (PIB)". This very important piece of legislation – perhaps the most important in Nigeria's economic and industrial development – has been so long in the making that a populace relentlessly driven to skepticism by its Government's consistent underperformance, would be entitled to feel, like Beckett's two characters, that there was no reason for hope.

In organizing this "positive-look-ahead" mini-round table on post-PIB scenarios, the Emerald Energy Institute is taking a patriotic leap of faith. To be sure, for something as critical and strategic for the country as the PIB, the wonder is that several years since it was proposed, the bill still has not been passed. The brand of 'politicking' and the apparent lack of commitment have been typically Nigerian.

Give the PIB half the attention now being lavished (wasted?) on various maneuverings for elections that are two years away, and the country (as well as the politicians!), would be the better for it. So, it is certainly not too early to begin building scenarios of

various options and possibilities the better to ensure that the difficulties likely to arise in the implementation of the expected law are reduced to the minimum. The PIB, so to speak, must hit the ground running. Such are the expectations it has raised in the communities.

When he first presented it to industry operators, the former Minister of Petroleum, Dr. Rilwanu Lukman, described the PIB in near-revolutionary terms. According to him, Nigeria was going to "move in one step from one of the most opaque petroleum nations in Africa to one of the most open and transparent in the world" – not just in Africa (NNPC, 2008). If so, the delay in the passage of the bill must be a clear evidence of how prepared the Nigerian ruling class is to make history. One has learnt to be cautious and to look critically and closely at their body language any time Nigeria's leaders raise new programmes and policies with fanfare and enthusiasm: the political landscape is strewn with the graves of their noble intentions - to diversify the economy, to improve public electricity supply, to fight corruption and to set up for Nigeria a vision and a road map for achieving its potential in the shortest possible time. If nationalism is the last refuge of the scoundrel, then loud and persistent profession of honesty, transparency, accountability and integrity is the first declaration of the average Nigeria politician who will very likely disappoint.

II. PIB'S IMPACT ON COMMUNITIES

It is important to step back at this point to understand the political context in which the PIB is placed. We must remind ourselves that in the communities we talk about so clinically there are real people; bona fide citizens, according to the Constitution of the Federal Republic of Nigeria. They are not just objects one encounters in the process of searching for, and producing, oil and gas. All this may sound elementary, but it is important to properly situate them in order to fully appreciate the import potential impact of the bill and how they are likely to view it.

First, we note the obvious point. In a presentation he made to invited participants to an interactive session, Engr. Hubert Nwokolo, then General Manager of the Shell Petroleum Development Company of Nigeria's (SPDC's) sustainable

community development programme, drove the point home when he listed the three most critical factors that the state and any private operator in the oil and gas industry must deal with. “The first is community. The second is community, and the third is community”. There was just no avoiding the communities. They live in and derive their sustenance from the same environment where exploration and production must take place. In other words, how the operator treats – or is perceived to treat – the communities makes the difference between stalled or successful operations. Between communities and the operators there is real political struggle, which presents as merely economic activity leading to some sort of development.

Secondly, we disaggregate the community to better appreciate its vital elements. Each community comprises two major classes: the peasant and the petty bourgeoisie. Among the peasants are men, women, and youths of the community. The petty bourgeoisie comprises mainly traditional rulers, chiefs and teachers who, from time to time, mediate relations between the community and the companies or the state. With the latter leading, these two classes engage the urban-based company/state in continuous struggles for so-called development. In the course of this “development” whose content is a form of struggle, some peasants must – all things being equal - be transformed into either a proletariat (if they acquire the skills to get jobs) or the petty bourgeoisie (if they have the connections to get contracts). Where the local economies collapse and no viable alternative replaces it, as is currently the case, they are not even just abandoned in their natural state but in a worse condition – thanks to the fact that the relationship between the peasant and the urban economies is an unequal one. In the specific case of the Niger Delta, this is compounded by the fact that the environment no longer supports the peasants, so they live on as shadows of themselves. Then again they could be transformed out of the peasantry but not into any other viable class: they become the lumpenproletariat - where they are available to be recruited as thugs or militants.

Either way, what results is a potential cocktail for social stresses and political conflicts. The PIB or any other legal instrument should aim at mediating this relationship between peasant and capital. This begins to explain why communities that once welcomed the oil companies before the “transformation” fully got underway, now confront them with hostility and violence at the least provocation (Ekekwe, 2003). There is no part of the world where the encounter between capital and peasants has been pleasant. The challenge of any law made by a responsive and responsible state can only be to ameliorate the inevitable hardship and minimize conflict. Let us go ahead then to see how the PIB fares in this. With this at the back of our minds, let us look at some of specifics.

Already in some of the objectives of the proposed law we can see areas that, broadly speaking, have serious community implications. Some of these objectives are to:

h. promote transparency and openness in the administration of

the petroleum resources of Nigeria;

i. promote the development of Nigerian content in the petroleum industry;

j. promote the health, safety and the environment in the course of petroleum operations; and

k. attain such other objectives to promote a viable and sustainable petroleum industry in Nigeria (PIB pp. 12 – 13).

If these objectives were achieved, there are a number of positive gains for the people in the communities. Much transparency and openness is going to be necessary if the communities are to have confidence in, for example, the operation of the community fund (to which we will come later) that is provided for the bill. As we will point out below, this provision is contentious enough. Making the process for its administration as open and transparent as possible can only help matters. Transparency is especially called for in calculating the yields from various wells and fields. Furthermore, as the new law helps to promote Nigerian content – some prefer to call it local content – new job and contract opportunities will open up. It can be expected that skilled and enterprising members of the community will benefit and the generally depressing economic situation in the host communities can begin to slowly improve. On the environment issue, we will have a little more to say below. Suffice it to note here that the environmental issue in the Niger Delta has been a source of much national and international interest. The situation is at the base of much of the negative report on the country and its oil and gas operators. The very wide negative publicity which the United Nations Environment Programme (UNEP) report in Ogoniland has generated is only the latest case in point.

Even in the early sections of the Petroleum Industry Bill (PIB) we see the potential seeds of conflict. Potential and actual community issues begin with the definition of property rights in this matter. For some reason which defies the basic logic of equity and fairness, of federalism and of democracy, the proposed law, repeating the provisions of extant laws governing the ownership of oil and gas in this country, ousts the communities who traditionally owned the land from which these resources are exploited. Thus section 2 of the PIB (2012: 11) specifies that the “entire property and control of all petroleum ... is vested in the Government of the Federation”. But there is a double irony in that stipulation.

First, in vesting in itself the ownership of these resources and the land in which they are found, government has, obviously inadvertently, ensured that the communities are actually in a position to strongly influence the fate of the oil and gas industry - even if this is only in a negative way. Along with the Land Use Act, this provision strikes at the very heart of peasant survival and reproduction because it is about land and waterways, the peasants’ major means of production. Therefore it was bound, sooner or later, to breed overt conflict. The character of the peasantry which makes them appear politically powerless also earns them sympathy and support from other class elements, some of them bare-faced opportunists, in a struggle for survival.

This, essentially, was what metamorphosed most dramatically, in the recent armed struggle by youths in the Niger Delta which was only doused through the federal government’s amnesty programme. The slogan about “resource control” unites all classes in the Niger Delta and finds much sympathy beyond the zone. The PIB has not at all taken cognizance of the root causes of this destabilizing factor.

The second irony here is that this provision is only a little, if at all, different from the 1946 colonial Ordinance which vested ownership of these same resources in the British government. As Ariweriokuma (2009: 210) noted, that Ordinance vested the wealth of the Niger Delta in the British Crown! The apparent reincarnation of the spirit of the ordinance could justifiably be described as a case of ‘Nigeria is now independent, long live (internal) colonialism’. And the history of this issue is not done yet. Just as the National Council of Nigeria and Cameroons (NCNC) vigorously protested what it called the “obnoxious ordinances” in 1947, so have people of the Niger Delta been protesting what they see as a legal device to dispossess them again in independent Nigeria. It was one of the major factors behind the 1998 Kiama Declaration. Later it was to feed the militancy in that zone. The laudable amnesty policy and the accompanying rehabilitation programme notwithstanding, it would be wrong to presume that agitation on this matter has petered out. There is need for continuing attention and policy innovation. Unfortunately one searches the PIB in vain to see any such innovation with respect to the property rights issue.

Another area that has often been a source of conflict between communities and operators as well as with the Nigerian state has to do with timely payment of adequate compensation where necessary. Section 198 of the PIB (p. 101) addresses this point. It enjoins operators to protect crops and trees of value and objects of veneration by communities. In the event of any damage to these, the operator is to “pay fair and adequate compensation to the persons or communities directly affected by the damage or injury” (PIB, 2012: 101 – 102). Such compensation “shall be determined by the Inspectorate in consultation with designated persons and representatives of the person whose protected objects have been damaged”. The offending party must pay within thirty days or face a penalty which may include “the suspension of the license or lease” (PIB, 2012: 102).

This provision reads well as it stands, especially because it was careful to prescribe a thirty-day time limit for the payment of compensation, and expresses readiness to suspend the operator’s authorization to explore or produce in the event such an operator fails to pay up. Perhaps, just perhaps, this might give some protection to community residents who, even psychologically, feel unable and unwilling to confront the operators. But we must note that this will not entirely remove the animosity that has in the past characterized community demands for compensation. The official rates for such compensation were usually so low that some operators, in a show of enlightened self-interest, chose to pay relatively higher rates than what was officially prescribed – which higher rates were still objectively low. It is to be hoped

that those to implement the law will want to look specifically at some template for compensation for different crops at viable economic rates. As we will argue below, there is no better strategy for ensuring uninterrupted exploration and production than by creating a truly win-win situation in which communities see themselves as veritable stakeholders in the industry.

Let us return to the issue of environmental protection. That the environment is of critical importance to peasants and fisher folk who depend on the land and water for the means to reproduce themselves is to dwell on the obvious. In sections 200 - 205, the proposed law makes ample provisions for environmental management, and this is commendable. But anybody faintly familiar with how extant laws on the environment have been handled will be forgiven for not being optimistic that much will change under the new legal regime. The laxity on enforcement, the tendency of the operators to under-report incidents and the level of corruption even in the communities combine to reinforce skepticism and doubt.

We can be sure that one aspect of the proposed law that has continued, and will continue to generate excitement is the provision of community fund. Under sections 116 – 118, the proposed law provides for the establishment of “a fund to be known as the Petroleum Host Communities Fund”. This fund is to be used “for the development of the economic and social infrastructure of the communities within the petroleum producing areas” (p. 63). It is built from a monthly payment by each operator of 10 % of its “net profit” from “operations in onshore areas and in the offshore and shallow water areas. Ten percent of profits from deep water areas” which is also paid into the account is specifically only for the benefit of the littoral States” (p. 63).

Up to this point, one would be impressed that for the first time the law regulating the oil and gas industry has not just assumed away the oil bearing communities but has specifically recognized their interest. But here, the devil is in the detail: this otherwise commendable provision is most likely to breed more unrest than peace, at least in the short term. If it was envisaged to satisfy the yearnings of the communities, it just might not. Let us see why.

First is the basic problem of determining how much would be attracted into the fund. In other words, what is the net profit as defined in the bill? According to the proposed law, this answer appears obvious and simple. In the said bill, “net profit” means the adjusted profit less royalty, allowable deductions and allowances, less Nigerian Hydrocarbon Tax, less Companies Income Tax.” One does not to be a Mathematician to see that the endless stream of less this and less that might in some cases end up in zero. To be sure, the sum will not be zero in all cases. However, if even in one case it turns out to be zero this will already be big enough for avoidable trouble. It will be very difficult, if at all possible, to convince any community that a well in its area could yield no “net profit” for the fund. The deductions and allowances alone provide enough room for maneuver in packing all sorts sums in the operators favour and leave the

communities with an empty net. The Nigerian oil industry operators are not famous for transparent calculation of their profits, net or gross (Ariweriokuma, 2009: 119), and so they do not enjoy much confidence from the community youths and lawyers in this regard. These days many of those community youths and lawyers have taken to specializing in matters concerning the oil and gas industry. The state and the operators can expect to do legal battle with them concerning the calculation funds derivable from specific wells.

But let us take the more positive scenario, where some appreciable fund does accrue into the Petroleum Host Community Fund. There ought to be some clear modalities for handling it. As things stand, no option has been marked out by government at any level, as far as one can tell. Rather it is the communities that have been busy with various plans, some of doubtful paternity and utility, on how they can manage the funds. This, it is important to note, is because they are in most cases expecting direct payments from the fund. If inter and intra-community strife which might result from handling the fund is to be avoided, some creative and proactive process ought to be adopted as part of the bill and deployed as the bill (hopefully) becomes law. Let us take the liberty to look at some possibilities.

III. Possible Models for Community Fund

One method worthy of further study and consideration as a possible model for handling the community fund is the one deployed by Kogi and Benue States in handling the money each of them received from the federal government to assist victims of the 2012 flood disaster that hit many States in the country. Kogi State found some imaginative way to distribute the relief money to victims, following consultations with beneficiaries. This approach in which some flood victims “got N5000, some N3500; in another local government some people got N700, some got N2000” inspired Benue State. During consultations with flood victims, according to the Benue State Governor,

... some say they want the money distributed, some say well, if there is something meaningful that can be done so be it. So we decided as a government, we owe it as a duty to the people to do what is outmost[sic] benefit to them. And we sat down and shared the money according to the demand ratio based on the damage that was done (Okoh, 2013:16).

What is of interest in this “Kogi-Benue model” is its high democratic content as well as the apparent detail and thoroughness implied in differentiating the level of damage each recipient suffered and how much, therefore, was his/her due.

A second possible option for managing the fund is the Global Memorandum of Understanding (GMOU) model that some oil companies have deployed to streamline their corporate social responsibility (CSR) activities in the various host communities. Briefly, this model provides for the clustering of (production, asset and pipeline) communities within specific oil fields into some sort of development areas, based on geographical contiguity and some degree of common association. In some cases these clusters coincided with local government boundaries. An

example was the group of communities in SPDC’s Ubie field which was constituted into the Ahoada East cluster; the cluster more or less coinciding with the local government area. In some other cases, a local government area could host more than one cluster. For instance, the Adibawa field in Ahoada West yielded two clusters while Obio/Akpor local government area yielded five clusters (in part because SPDC’s office and residential assets were grouped as ‘oil fields’).

Expectedly, the process of defining these clusters created its own problems within and between communities. But the concept itself offered the possibility of achieving some coherent developmental activities with available funds. The model was fairly attractive to the communities because it guaranteed them some five-year stability in funding their development activities. Moreover, it removed the oil company from the unsustainable process of determining for the communities what development projects they must have – a process the communities considered paternalistic. The GMOU model created a governing structure with in-built controls: there was a “Trust” in each community within the cluster, and a Board at the cluster level. It provided as well as for a process for managing available funds, with transparency and accountability. For considerations of time and space, we need not go into further details in this paper. Any lessons from the GMOU for purposes of managing the Petroleum Host Community Fund would best be drawn not from the oil companies but from the communities who have experienced it. To be sure, it offers a potentially strong example of what might be done.

The third option is the Alaska model. Out of concern that the oil and gas-rich State of Alaska in the United States of America might wake up one fine day and find the golden resource had been depleted and the local economy deprived of any source of growth, the Government of the State established the Alaska Permanent Fund in 1976. The fund’s initial deposit that year was a modest \$734, 000. Due to prudent handling the Fund in 2012 now housed, according to Businessweek magazine (February 20, 2013), at an estimated \$45 billion. This is notwithstanding the yearly deduction of operating expenses and the dividends that Alaska citizens receive. The dividends, understandably, fluctuate, reflecting the international price of oil and the fortunes of investments made from the fund. Thus the lowest divided paid was \$331.29 in 1984 (with the world price of a barrel of oil at about \$28.74). The highest was \$2, 069 paid in 2008 (Adam, 2012).

There is nothing that suggests that these models – and there may well be others we have not presented here – will solve all the problems associated with the proposed Petroleum Host Community Fund. From just our general understanding of state-community relations in this country, the Kogi-Benue model, for all its promise of being democratic, could easily lend itself to high-handedness, lack of transparency and corruption. But this can be minimized where civil society organizations and the beneficiaries themselves monitor the process effectively. Were this model adopted, some legal framework defining roles of

community-based organizations, state agents and the recipients themselves ought to be put in place. The key here would be to ensure that the process of handling the funds are transparent and democratized.

The GMOU model, as we already mentioned, contains measures to ensure a high degree of transparency and to minimize possible corruption. In this model, for instance, the oil company which provides the funds, as well as representatives of the State, are signatories to the account. Projects for implementation must emanate from the community and be agreed to by the community trust as well as the cluster board. So, the communities can take charge and ownership. This model, like the Kogi-Benue variety, tends to enhance local democracy.

Although it has been quite successful by any measure, the Alaska fund is not without its critics. For instance, Hollybell (2013), leaning on a study by the Institute of Social and Economic Research of the University of Alaska, argues that although it has become very popular and it is something the residents of Alaska look forward to, the payment of dividends is ultimately harmful to the economy because it discourages saving. If dividends were not being paid, the Fund would have doubled in size – so the argument goes. It made sense therefore, that all dividend payments should be stopped because what success the fund had achieved was because of the discipline and transparency in handling it, and because of the patience citizens have to see it grow. These can only be improved upon, in Hollybell’s view, by abolishing payment of dividends.

All the three models have the potential for empowering people in the communities. But the Kogi-Benue and the Alaska models, especially because of their redistribution potential, can more directly empower the weak and the poor who may not be able to vie for contracts. But as we can see, this is precisely why such models are weak, according to the Hollybells of this world who believe the money could be better used if it was saved. As far as we can see there is absolutely nothing wrong with saving, but it should be voluntary and not coerced even by any indirect means. If indeed the money belongs to the people then they must decide how best they want to use it. They may be advised, but ultimately the decision has to be theirs. This further underlines the need to ensure that a democratic process is infused into whatever model(s) is (are) chosen.

Peace and stability in the host communities are most essential for attracting investment and growing the oil and gas industry. For these to come about, it is essential to adopt a strategy which can create a win-win situation between the state, the operators and the community. This is not impossible and is certainly not as difficult as it seems. In our view, the state and all operators ought to study the model that Totalfina Elf has deployed in its operations in the Ogba/Egbema/Andoni local government area of Rivers State. Here the operator seems to have devised a process by which it makes community leaders, youths and peasants genuine stakeholders. The operator ensures that contracts are awarded in such a way that they create local jobs and that the communities have adequate infrastructure. This is

apparently why the Egi clan communities fully identify with the operator, to the extent that community youths willingly protect the company’s assets and disallow infiltration into the area by negative elements.

It is possible to replicate this model, but many operators would think it is expensive and therefore not sustainable. But following that apparently logical reasoning is eventually self defeating. That conclusion about cost is difficult to see because no one has actually calculated what the cost of avoidable shutdowns, shut-ins, delays in exploration and production, even forces majeure, really is. And the state, which should lead in protecting community interest because it is a major beneficiary of oil and gas operations and has the primary development responsibility in the area, has shown little interest. How can anyone be sure that the cost of implementing the amnesty programme would not be more than what was required to make militancy unattractive in the first instance? But, let us not digress!

So far we have focused on some of what the proposed law says. It would be useful to look even briefly at what it has not said about communities because this will have to be factored into its implementation. We have in mind here what becomes of the Niger Delta Development Commission (NDDC). The apparent lack of clear direction on this is curious because the PIB considers provisions for how NNPC should relate to the change process which the law envisages. With respect to the NNDC, one does not see whether it will remain in place. If it will not, how does the state go about creating the basic infrastructure in the zone that was basically the mandate of the agency? Indeed, the PIB (p. 63) proposed that the PHCF would be used for building economic and social infrastructure. But, why and how? If this were to be the case, are we to assume that the state is excusing itself from driving the development of the communities and wants to use what is rightly community fund to fill the hole it has dug? But this would be completely lacking in any sense of logic and/or equity.

On the other hand, if NDDC does stay, how will it be funded? Will oil companies still be making contributions to its budget; will such contribution be calculated as part of production or would it come from their share of the profit? Many questions stare one in the face and suggest that for the communities the PIB may deliver less than its promise of community development. Not for communities the rosy picture painted by the former Minister, Dr. Lukman. We may indeed take consolation in the fact that no single human law, no matter how well crafted, ever answers all the problems it is supposed to address: the hope would be that it does not worsen the situation as part of its unintended consequences.

IV. CONCLUSION AND RECOMMENDATIONS

In sum, the only ray of hope in the proposed law for some positive change in the fortunes of the host communities is in the provision for the Petroleum Host Community Fund. But as we have seen, it is not really clear that this money belongs to the communities and that they may do with it as they please. The

letter of the proposed law suggests that this decision has already been made for them. In our view, it is only when this fund is seen as the communities' share of the royalty that it will go a long way in ensuring long-term peace and stability, which long term stability the state needs to grow the industry and concentrate its energy on serious economic and political development issues. It will then create positive stakeholders out of the communities; they will then have an interest in protecting the assets of the industry. Each of the models we have previewed has its strong as well as weak points. But it is possible to maximize the strong points and minimize the weak points if government and the communities, in the belief that the bill surely will pass, begin sooner than later to plan possible implementation strategies.

The most serious danger we can foresee is to assume that implementation will be smooth and easy. Already the communities are excited about this PHCF provision and it should not take much to imagine that different scenarios and strategies are being canvassed. There would be no harm whatsoever in engaging those advocating the various plans and ideas. Perhaps they might offer some insight that may not now be evident. One would be remiss to sidetrack any view or group. Were that to happen then the neglected group or position could provide a point of attraction for some opposition.

From a purely technical point of view, the PIB apparently has the potential; to grow the industry. If so it could not have come sooner. Any further delay in its passage does serious damage to the economy and image of the country. But we have also known from bitter experience in this country that it is not technology but the "soft" issues of community relations and infrastructural development in the Niger Delta that can determine whether or not the oil and gas industry thrives. It is against that background that we recommend as follows:

i. The bit of the law vesting ownership of oil and gas in the federal government should be expunged. Government should not be in the business of dispossessing its own citizens; certainly not any government that preaches the virtues of private enterprise, human rights and democracy. Ownership of oil and gas resources should rightly belong to communities. But one is not so bright-eyed as not to see that this would breed much inter and intra-community strife. In that case, then ownership of these resources should be vested in State Governments. This will decidedly settle the much-vexed issue of resource control.

ii. The law should provide for a marked percentage of oil and gas royalties to be paid into the sovereign wealth fund (SWF). The PIB must clearly recognize that oil is a wasting asset and that the country needs to find some means of ensuring future growth. This is what the Arab nations with whom we sit in OPEC have been doing.

iii. The PHCF should be provided unequivocally as a source of direct annual payment to all bona fide citizens of the oil and gas host communities. In other words the bill should adapt the Alaska model to local conditions.

iv. The creation of the PHCF should be without prejudice to the

NDDC. However, where it is accepted to return ownership of oil and gas to the States, the agency should be scrapped and each State should worry about how to deliver infrastructure to the communities.

v. The distinction which the bill makes between littoral and other oil and gas States is unhelpful. It should be dropped.

While Nigeria has been playing 'waiting for Godot' with the PIB, other jurisdictions in Africa have joined the club of commercial oil and gas producers. Technological development is facilitating the advent of new oil into the global market. All of this impact negatively on any advantage Nigeria has had in global oil and gas economy. The only thing that could be worse for the industry than the delay in passing the PIB would be to leave unattended the myriad community issues that plague the industry. The suggested amendments to the bill can help to address these issues in novel and fundamental ways.

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ENVIRONMENT AND SUSTAINABLE DEVELOPMENT, POST PIB



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EXECUTIVE SUMMARY

The drive towards Environmental sustainability has become a big issue and there is increasingly stringent legislation and concern by organizations to achieve sound environmental performance by controlling the impact of their activities, products or services on the environment. The overall aim is to support environmental protection and prevention of pollution in balance with socio – economic needs. The oil Industry in Nigeria and environment have been managed to be antagonistic instead of allies. Collaborative efforts involving a number of governmental, non-governmental organizations and other stakeholders is a panacea for sound environmental management and sustainability.

The objective of this paper therefore is to examine the impact on the environment and sustainable development after the PIB becomes operational.

THE OIL INDUSTRY IN NIGERIA AND ENVIRONMENTAL POLLUTION

The oil and gas sector in Nigeria has been a "sweet and sour story", the case of winning by losing. At present, there are many environmental problems some of which get more complex from day to day, threatening the very existence of inhabitants in areas of operations.

The environment is defined as a life supporting system consisting of the air, water, land and all plants, human beings and animals living there-in and the inter-relationships which exist among these or any of them (SPDC, 1999). Nigerian Petroleum Industry, while creating more wealth and job opportunities, have also, created and thrown out a lot of unwanted and toxic substances

into the environment. Harmful waste effluents have also been thrown into the water bodies and unwholesome garbage onto the land. These have the effect of reducing their natural quality and hence, the quality of life, a case of losing by winning. However, for much of history, the enhancement in the quality of life arising from new technology has overshadowed its negative effects upon the environment. Recently, there has been some doubt as to whether the further development of technology will necessarily guarantee an improvement in the quality of life.

The inhabitants where the operations are undertaken are under a severe threat as a result of pollution associated with alteration of the natural environment producing a condition that is harmful to living organisms. The negative effect of pollution arising from oil and gas exploitation activities affect the inhabitants directly, or through his supplies of water, agricultural or other biological products, his physical objects or possessions, or opportunities for recreation and appreciation of nature. They will not have a place to live if we do not stop or control pollution (<https://www.epa.gov.tw>, 2009).

It is in the context of these compelling concerns for public health and the environment that we cannot but talk about protecting the delicate and irreplaceable features of our natural world and the needed resources to sustain life on this planet.

Industrialization has imposed pressures on the environment and human health from several sources, including the extraction and consumption of raw materials, emissions of industrial pollutants, and increased energy demand. In most developed countries, decades of strong regulations

have brought some of the worst pollution problems under control, although serious problems still remain (<https://www.wri.org/publication/7832>, 2009). In the less developed countries, where regulations and enforcement tend to be more relaxed and pressures for economic growth are intense, pollution abatement remains a critical challenge. Implementing changes to make industry both cleaner and more efficient could greatly influence health, both today and in the future. Although the initial costs of cleaner technologies may be higher than those of older technologies, the provision of financial and technical assistance can encourage their adoption. Such a strategy will offer economic savings and environmental and health benefits long into the future.

Findings from UN survey on the most serious world issues that exist today and into the 21st Century indicated that a case can be made that 82% of the issues are directly related to the environment and/or natural resources (Wilson, 2006). This has raised a great concern and made for a quest to develop a worldwide effort to monitor and restrict global pollution since most forms of pollution do not respect national boundaries (Joel, 2002). Despite the effort that has been made by various Organizations and Countries to control pollution, the level in pollution abatement and sound environmental management and sustainability still remains a mirage.

ENVIRONMENTAL SUSTAINABILITY

The idea of sustainable development grew from numerous environmental movements in earlier decades and was defined in 1987 by the World Commission on Environment and Development (Brundtland Commission 1987) as: Development that meets the needs of the present without compromising the ability of future generations to meet their own needs. This contributed to the understanding that sustainable development encompasses a number of areas and highlights sustainability as the idea of environmental, economic and social progress and equity, all within the limits of the world's natural resources. However, the record on moving towards sustainability so far appears to have been quite poor. Though we might not always hear about it, sustainable development (and all the inter-related issues associated with it) is an urgent issue, and has been for many years, though political will has been slow-paced at best. For example, there are

- 1.3 billion without access to clean water;
- about half of humanity lacking access to adequate sanitation and living on less than two dollars a day;
- approximately 2 billion without access to electricity;

The 1992 Rio Earth Summit was attended by 152 world leaders, and sustainability was enshrined in Agenda 21, a plan of action, and a recommendation that all countries should produce national sustainable development

strategies. Despite binding conventions and numerous detailed reports, there seems to have been little known about the details to ordinary citizens around the world.

In the 10+ years since Rio, there has been little change in poverty levels, inequality or sustainable development, as the World Development Movement notes. "Despite thousands of fine words the last decade has joined the 1980's as another 'lost decade for sustainable development' with deepening poverty, global inequality and environmental destruction".

SUSTAINABLE DEVELOPMENT AND POST PIB

When the World Commission on Environment and Development presented their 1987

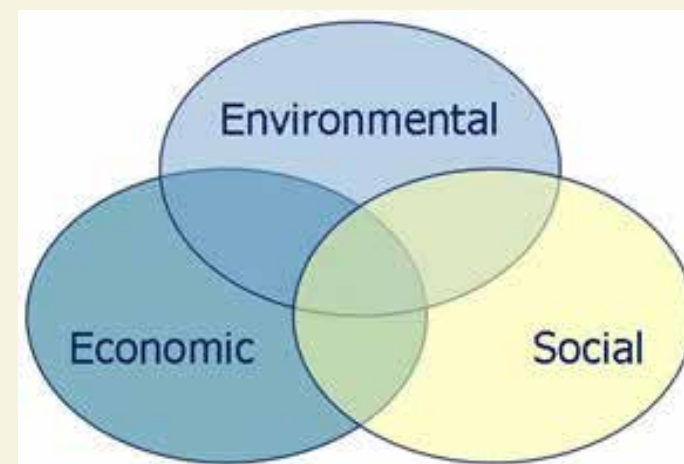
report, Our Common Future, they sought to address the problem of conflicts between

environment and development goals by formulating a definition of sustainable development:

Sustainable development is development which meets the needs of the present without compromising the ability of future generations to meet their own needs.

In the extensive discussion and use of the concept since then, there has generally been a

recognition of three aspects of sustainable development.



- Sustainable development is an emerging and evolving business concept that is based on the three key elements of:
- Economic prosperity, environmental protection and social equity.
- There is a basic trend in the business community toward the belief that a company cannot be successful long term unless all the three elements are being effectively managed.

• ECONOMIC:

An economically sustainable system must be able to produce goods and services on a continuing basis, to maintain manageable levels of government and external debt, and to avoid extreme imbalances which damage the environment.

• ENVIRONMENTAL:

An environmentally sustainable system must maintain a stable resource base, avoiding over-exploitation of renewable resource systems or environmental sink functions, and depleting non-renewable resources only to the extent that investment is made in adequate substitutes. This includes maintenance of biodiversity, atmospheric stability, and other ecosystem functions not ordinarily classed as economic resources.

• SOCIAL:

A socially sustainable system must achieve distributional equity, adequate provision of social services including health and education, gender equity, and political accountability and participation. Clearly, these three elements of sustainability introduce many potential complications to the original simple definition. The goals expressed or implied are multidimensional, raising the issue of how to balance objectives and how to judge success or failure. For example, what if provision of adequate food and water supplies appears to require changes in land use which will decrease biodiversity? What if non-polluting energy sources are more expensive, thus increasing the burden on the poor, for whom they represent a larger proportion of daily expenditure? Which goal will take precedence? In the real world, we can rarely avoid trade-offs, and as Richard Norgaard points out, we can "maximize" only one objective at a time. Norgaard concludes that "it is impossible to define sustainable development in an operational manner in the detail and with the level of control presumed in the logic of modernity".

Sustainable development is possible only if component systems as well as the total system are viable. Despite the uncertainty of the direction of sustainable development, it is necessary to identify the essential component systems and to define indicators that can provide essential and reliable information about the viability of each and of the total system.

All these boundary conditions must be adequately addressed in the PIB to make it operate efficiently.

PROACTIVE MANAGEMENT AGAINST REACTIVE ENVIRONMENTAL MANAGEMENT ADVOCATED.

REACTIVE ENVIRONMENTAL MANAGEMENT

In reactive environmental management, we are always fighting the fire instead of the source (fig-1). Companies before now have been reactive in managing environmental concerns. They appear to be busy providing excellent

health facilities and safety gadgets yet neglecting the root causes of hazardous conditions and diseases which are consequences of poor environmental management arising from their operations. No wonder, despite efforts by oil companies in providing enhanced Services in medical care and safety issues, diseases and accidents appear to be on the increase.



Fig-1: Reactive Environmental Management (Joel, 2007)

PROACTIVE ENVIRONMENTAL MANAGEMENT

Taking proactive steps will help address the problems before they occur. The root causes of these environmental problems are tackled thereby minimizing the adverse consequences. No doubt as can be seen in figure 3, medical and safety related issues will decrease when the root causes are given adequate attention.

Proactive environmental management brings a lot of associated benefits. These among others include the creation of newer competitive advantages or strengthening of existing ones.



Fig 2: Proactive Environmental Management (Joel, 2007)

PRUDENT STEPS RECOMMENDED TO ENSURE EFFECTIVENESS WHEN THE PIB BECOMES OPERATIONAL

The following highlights among others are prudent steps to be taken to ensure sustainable development when the PIB becomes operational.

ENVIRONMENTAL EDUCATION

Environmental Education ("EE") refers to organized efforts to teach about how natural environments function and, particularly, how human beings can manage their behaviour and ecosystems in order to live sustainably (www.en.wikipedia.org, 2009). The objective of environmental education is to enlighten the public about the importance of protecting and conserving the environment and the need to restrain human activities, which lead to indiscriminate release of pollutants into the environment. At present, there are many environmental problems some of which get more complex from day to day and even, threatening the very existence of mankind on earth. Personnel must be trained in environmental areas commensurate with their responsibilities.

There is need to beef up campaign and awareness programme to enlighten the citizens on the importance of environmental preservation and conservation.

All employees whose work may impact the environment must be aware of the importance of conformance with the EMS, the significant environmental impact of their work activities and their responsibilities in achieving conformance.

Once the people understand the significance of preserving the environment, they may take action to help reduce the harmful effects of civilization on the ecosystem (Smyth, 2006).

ENFORCEMENT OF EXISTING LAWS AND ENVIRONMENTAL LIABILITIES

There need for government and its agencies to enforce environmental laws. Federal Government should enforce the EIA decree for every large scale development projects (Decree no. 86, 1992) and State Ministry of Environmental should

enforce the environmental edict of January 4, 1994 (reviewed) which empowers the ministry with the responsibility for the protection and development of the environment and biodiversity conservation and sustainable development of the state natural resources, under the act the agency is required to develop.

Environmental statutes, unlike criminal law, do not require proof of criminal intent.

As a result, employees, corporate officers can be found guilty, even if they did not know their actions would result

in a violation of the law. Corporations can be held liable for the acts of their employees. Adequate restitution must be paid by offenders with "pollute and pay for ever" principle invoked.

UTILIZATION OF GAS AS ALTERNATIVE TO FLARING:

This can be achieved through

- Re-injection of associated gas
- Power generation
- Gas consumption in the petrochemical industry

COMMITMENT TO EFFICIENT POLLUTION PREVENTION STRATEGY

Pollution Prevention is defined as "the use of materials, processes, and practices that reduce or eliminate the generation and release of pollutants, contaminants, hazardous substances, and wastes into land, water, and air. Pollution prevention includes practices that reduce the use of hazardous materials, energy, water, and other resources along with practices that protect natural resources through conservation or more efficient use (DOE, 1992). It is any action which reduces or eliminates the creation of pollutants or waste at the source, achieved through activities which promote, encourage or require changes in the basic behaviour of individuals and organizations. Pollution prevention could be achieved by the use of processes, practices that reduce or control pollution, which may include recycling, treatment, process changes, control mechanism, efficient use of resources and material substitution.

The goals of designing for pollution prevention are to minimize raw material consumption, energy consumption, waste generation, health and safety impacts, and ecological degradation over the entire life of the facility (USEPA, 1993a).

ENVIRONMENT IMPACT ASSESSMENT (EIA)

Awareness of the importance of environmental issues has been more and more central to the thinking of all stakeholders and regulators in recent years. Integration of development and environment in order to achieve a sustainable development is now a major issue all over the world (Nwachukwu, 2006).

The term environmental assessment describes a technique and a process by which information about the environmental effect of a project is collected, both by the developer and from other source, and taken into account by the planning authority in performing their judgments on whether the development should go ahead. In essence, EIA is a process, a systematic process that examines the environmental consequences of developmental actions in advance. Environmental resources cannot always be replaced, once destroyed; some may be lost for ever. Most projects were done without conducting an EIA. The negative consequence of such neglect is the root cause of most health and safety related incidents during the

operational stage of such projects.

The present practice where lip service is paid to EIA issues should be addressed with all seriousness in the new PIB. Mitigation of negative impacts as reflected in fig-3 and commitment from top Management should be a top priority in all projects.

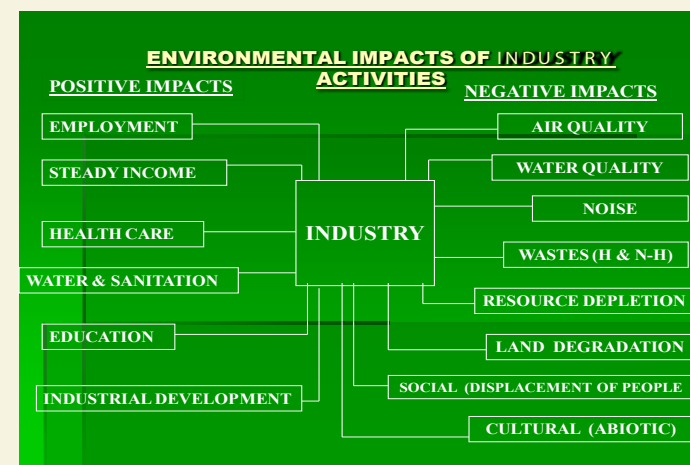


Fig 3: Environmental Impacts of Industrial Activities

REVIEW OF ORGANIZATIONS ENVIRONMENTAL POLICY

The environmental policy is the driver for implementing and improving the organization's environmental management system so that it can maintain and potentially improve its environmental performance. The policy should therefore reflect the commitment of top management to compliance with applicable laws and continual improvement. The policy forms the basis upon which the organization sets its objectives and targets. Companies should carry out gap analysis. The gap analysis will allow you to compare your current environmental management practices with ISO 14001 environmental management standard. This comparison will pinpoint the areas that fall short of the new standard (the gaps). Once you know where to focus your attention, you can begin to make the changes that are needed to comply with the standard. Key principles of Organizations implementing or enhancing an Environmental management System include, but are not limited to the following (POCEMA, 2009):

- Recognize that environmental management is among the highest corporate priorities.
- Establish a process for achieving targeted performance levels.
- Provide appropriate and sufficient resources, including training to achieve targeted performance levels on an ongoing basis.
- Evaluate environmental performance against the organizations Environmental policy, objectives and targets and seek improvement where appropriate.

- Establish a management process to audit and review the Environmental Management System (EMS) and to identify opportunities for improvement of the system.
- Encourage contractors and suppliers to establish an EMS.

In conclusion, the following prudent steps should be taken by Oil Industries in Nigeria to achieve sustainable environmental development when the PIB becomes operational.

- Encourage the development and use of environmentally friendly technologies for exploration and development.
- Apply Global Best Practice in their operations
- Implement an action plan to minimise or eliminate the environmental impacts of their activities.
- Must identify, assess, and control hazards as early as possible
- Systematically track environmental incidents and prevent their reoccurrence
- Should focus on pollution prevention and management rather than pollution control.
- Develop a proactive environmental management concept as against the orthodox reactive method which focuses on the outcomes rather than the root cause of the problem
- Should focus on the three key elements of economic prosperity, environment protection and social equity for successful long term operations.

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IMPACT ON NIGERIA'S INTERNATIONAL STRATEGIC ALLIANCES

By **PAUL MICHAEL WIHBEY**
President, GWEST LLC Washington DC



THE OLD OIL ORDER & STRATEGIC ENERGY ALLIANCES

Traditional pattern of the strategic relations based on:
Consistent large volumes of oil / gas from Producer to Major Consumer over long period of time, such as:

- KSA to US
- GCC to Japan
- Angola to China
- Nigeria to US

Benefits to Producer include: Increased Security Assistance; Increased Trade and Commerce

New Oil Order & Emergence of Integrated Supply Chain

New technologies and new market conditions are changing the nature of these Energy Alliance Systems using Supply Chain Portals:

Well-head to midstream, downstream, transport, processing, distribution, to retail,

- Creates net value,
- Builds competitive infrastructure,
- Leverages key logistics,
- Synchronizes supply with demand

Net Impact: Cost efficiencies; Reduction of price volatility; Secured long-term markets; Investment confidence.

US Import of Nigeria Crude (US DOE, April 2013)

- Crude oil imports of 405,000 bbl/d were down 42% from 2012, the lowest since 1985.
- Growing US production of light sweet crude oil of similar quality to Nigerian crude & lower demand for light sweet crude from US East Coast refineries contributed to the decline.
- US oil shale production dramatically reducing imports' share.
- Nigerian decline most significant of the top 5 exporters to US.

NEW STRATEGIC ENERGY PARTNERS FOR NIGERIA?

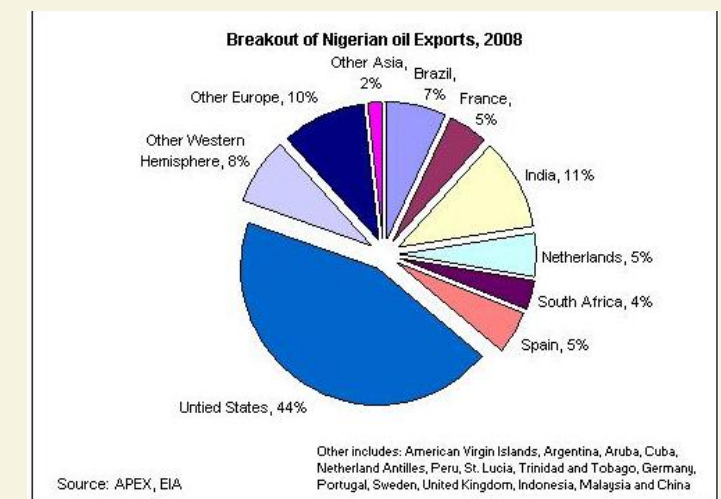
Does Nigeria have any opportunity to secure long-term, large oil import markets based not only on the traditional buy-sell Energy Alliance relationship, but more significantly, based on the economically-value added Supply Chain configuration?

This issue needs greater study and research by Emerald Energy Institute & IPS, including the critical importance of the PIB and Nigerian Downstream reforms.

Both Brazil (continuing domestic E&P) and India (geopolitical & domestic economic factors) are problematic.

However, for the purpose of this Mini-Roundtable, two market jurisdictions with promising growth patterns, immediate energy needs & supply chain capabilities are suggested as Strategic Energy Partners for Nigeria: Turkey and Indonesia/Australia.

Nigeria-US Energy Alliance 2008



Port Harcourt Petroleum Roundtable No. 3

THESE CONCLUSIONS WERE SUBMITTED TO THE NATIONAL ASSEMBLY
DURING THE SENATE PUBLIC HEARING ON THE PETROLEUM INDUSTRY BILL IN JULY 2013.

CONCLUSIONS AND RECOMMENDATIONS OF THE THIRD PORT HARCOURT PETROLEUM ROUNDTABLE, HOSTED BY EMERALD ENERGY INSTITUTE FOR ENERGY ECONOMICS, POLICY AND STRATEGIC STUDIES, UNIVERSITY OF PORT HARCOURT, ON FRIDAY JULY 5, 2013.

THEME: THE NIGERIAN OIL AND GAS ECONOMY, POST PIB.

1. In line with the mandate of Emerald Energy Institute for Energy Economics, Policy and Strategic Studies, University of Port Harcourt, the roundtable sought to develop forecasts and perspectives for government policy makers and operators on the short, medium and long-term outlook of the Nigerian oil and gas sector, when a robust and effective Petroleum Industry Bill (PIB) is passed and operational.

2. While noting that the long delay in the passage of the PIB has robbed the country of many benefits and advantages, the roundtable observed that the Bill's multiple structural weaknesses and shortcomings as identified by speakers, would be more injurious to the country if the Bill were passed in its present form.

3. The roundtable also noted that Nigeria is no longer the sought after bride, as several other West African countries have now discovered oil and provide new, competitive options for international investors. Therefore the National Assembly must review taxes, royalty rates and government take from E&P operations to reflect these realities.

4. There is significant change in the world energy order, occasioned by new technologies and new supply and demand dynamics, which the bill has not, but must address, to be relevant. The new bill should create flexibility and competitiveness as response to the changing world energy order.

5. In the light of the above, and the reduction of the contributions of crude oil exports to GDP, Nigeria should boldly move away from commodity trading, to full

processing of crude oil and gas resources, to realize their full value chain.

6. In addition, government policy for the energy sector should deliberately focus on value creation through energy utilization and entrepreneurship. Actualising the value chains above is the solution to industrialization and unemployment in Nigeria.

7. The new bill should restore the provisions which support research as proposed in the original bill, in particular, the National Petroleum Research Centre (NPRC). The abandonment of research robs the nation of enormous opportunities to create jobs, knowledge and skills, especially because the IOCs ignore Nigerian universities and rely on research centres in their home countries. This is an avoidable export of jobs and encourages capital flight from the country.

8. The new bill must take care of the fiscal provisions to encourage gas production and utilization locally, which is the main driver of industrialization and environmental sustainability.

9. Nigeria needs to urgently review her international strategic energy alliances and the PIB should be crafted to support the emerging opportunities.

10. Government should focus completely on regulatory functions. All provisions in the PIB retaining investment or trading decisions with civil servants should be abrogated. In this connection, there is no need whatsoever to provide for frontier exploration by the state. Money wasted here could



be better spent in developing infrastructure, in the certain knowledge that investors will, under the right conditions, happily invest their resources in those kinds of exploration.

11. Government functionaries, including the President and Minister of Petroleum Resources, must be accountable to the National Assembly in the discharge of their functions as prescribed in the PIB. All arbitrary powers assigned to the functionaries mentioned above by the current version of the PIB should be abrogated. Otherwise, such powers may fuel corruption and abuse. They also make nonsense of the bill's promise to inaugurate transparency and accountability in the oil and gas industry.

12. The question of effective participation by host communities needs to be addressed. The present arrangements in the PIB leave the communities with virtually nothing – given the nebulous source of the proposed Petroleum Host Communities' Fund.

13. The community fund should be anchored on a percentage of definite revenue streams like royalties as against the unclear "net" revenue provisions embedded in several caveats.

14. If indeed money accrues to the Petroleum Host Communities Fund (PHCF), it should not be used for infrastructure development as prescribed in the Bill. This gives room for state and local governments to abandon

their responsibilities to the host communities. The fund should therefore be designated for direct benefits/projects chosen by the beneficiaries, and not for infrastructure development.

15. Security is a key challenge for the Nigerian oil and gas economy to remain competitive. It is also important to remove the incentives for criminality as presently obtainable, where criminal activities like crude oil theft are carried on with little or no punishment, while earning handsome financial rewards.

16 Government should aggressively pursue technology transfer and acquisition, including fabrication of offshore production assets and encouragement of indigenous operators to acquire or buy into existing marine assets and their supporting technologies from the present owners. That is an important avenue for building local capacity.

17 The proposed sale of a portion of the oil assets is a bad idea because it will automatically push Nigeria out of OPEC. Nigeria benefits more as a member of OPEC than being a non-member, especially since the economy is not yet diversified.

18 For sustainable development in the oil and gas sector, the three key elements of economic prosperity, environmental protection and social equity must be effectively managed.

sponsored by

THEME: THE NIGERIAN OIL AND GAS ECONOMY, POST PIB.

DATE: FRIDAY, JULY 5, 2013 | VENUE: INSTITUTE OF PETROLEUM STUDIES, UNIVERSITY OF PORT HARCOURT | TIME: 10 a.m

Under the Disputatious Chairmanship of
Dr Emmanuel O. Egonu, OON, P. Eng
Chairman, Emerald Energy Resources Limited



Dr. Egonu



Dr. Joseph Ellah
Moderator/Speaker



Mr. Ernest Nwapa
Panel Speaker



Engr. Emeka Ene
Panel Speaker



Dr. Jude Amoschulo
Panel Speaker



PANEL OF SPEAKERS: L - R: **EKEKWE, JOEL, WILLIE-ABBEY, ENE, AJIENKA, AMAEFULE, ELLAH, AMACHREE, AND OVIASU**

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