

## Managing Local Content Policies in the Extractive Industries

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### Abstract

Developing countries and National oil companies (NOCS) states with maturing mineral sectors, particularly extractive industries have placed a renewed emphasis on increased local content participation by international oil companies (IOCs) in recent years. Host nations and NOCs are emphasizing that the desire for an increased contribution to the local economy and society and a strategic intent to pursue local content go beyond philanthropy, and are beginning to expand their perspectives and mind-sets regarding how local content policy in the extractive industries can be managed. The paper begins with the introduction and review of literature, local content policy in Nigeria, local content policy objectives, local content Development model, challenges of managing local content policy in the extractive industries, managing local content policy impact in the extractive industry, outcome to be achieved through managing local content policy, government's efforts and Recommendations were drawn.

**Key words:** Managing, Local Contents, Policies, Extractive, Industry.

### Introduction

Delivering local benefits in the communities where extractives industries operate is no longer a choice. It is a commercial necessity and one that is increasingly mandated by law. In the new competitive landscape of waning supply and increasing demand for energy and mineral resources, Companies in the extractive industries face rising expectations to do more than simply mitigate negative impacts, serve as sources of tax/ royalty revenue, and act as good neighbours.

Today, business success depends upon the ability of companies to develop local talent, build a competitive local suppliers base, and deliver lasting socio-economic benefits to the areas where they operate. The growing number of reported cases of project interruptions due to non-technical risks-including stakeholder presumes, Socio-economic conditions and national policies is a testament to this, (Michael and Jessica, 2011). Analysis by Environmental Resource Management of delays associated with a sample of 190 of the world's largest oil and gas product (as ranked by Goldman Sachs) found that 73 percent of project delays were due to "above-ground" or non technical risk, including stakeholders resistance, compared to 21 percent due to technical risk.

Some companies have responded to non-technical risks through isolated investments in community development. Increasingly, however, companies are finding that they can drive more sustainable and commercial value with integrated investment approaches to community engagement by leveraging company resources (from assets to corporate level), third-party expertise, and civil society and multi-lateral partnerships and proactively developing local capabilities with strategic planning.

Although increasingly required by law in the extractive industry, local content represents the most strategic contribution a company can make to securing its social license to operate and leaving a positive legacy in countries. If deigned and implemented effectively, local content offers an opportunity for companies and governments to unlock mutual benefit from resource extraction by focusing on companies core competencies and supporting long term economic growth prospects. It is particularly relevant to large-scale projects in the mining and oil and gas industries yet the drivers, approaches, and tools for implementation can vary between these industries.

This paper offers insight into managing local contents policies in the extractive industries in Nigeria as a point of reference. It also highlights the challenges and opportunities for companies in building local contents approaches that drive commercial value, and provide recommendations.

### Literature Review:

Nigeria is Africa's most populous nation, resources rich and has a population of over 140 million. It is made up of over 250 ethnic groups and chequered with a past history of: Incessant political instability, bad governance, inadequate infrastructure and macro-economic mismanagement. The country has crude oil reserve of about 36 billion barrels and 19.2 billion cubic metres of natural gas. It is estimated that the country has realized about 600 billion US dollars since 1956 when it first discovered oil in commercial quantity in Oloibiri, present day Bayelsa state, from oil and gas (Atakpu, 2007, Ugwishi, 2010). Besides the large crude oil and natural gas deposits there are also deposits of gold, tin, gemstones, kaolin, bitumen and iron ore that can be harnessed to earn foreign exchange for the nation; although oil and gas has remained her main revenue base (Adebola et al., 2006). The

Nigerian government earns income from oil through the sales of crude, gas, petroleum profit tax (PPT), royalties and rent (from the industry partners and operators) (Agusto, 2002; Agusto, 2004; Obasi, 2003).

However, despite being a major oil producing country for decades, and accruing huge revenues from oil, Nigeria is ranked as one of the poorest countries in the world. Also, the lack of equitable distribution of oil wealth and environmental degradation resulting from exploration activities have been identified as key factors aggravating actions from environmental rights groups, inter-ethnic conflict, and civil disturbances from ethnic militias such as Movement for the Emancipation of the Niger Delta (MEND) and Niger Delta Vigilante Force (NDVF) (NDDC, 2005). Warner (2007) noted that like Nigeria's case, there are a number of oil rich countries where their governments have failed to translate their oil wealth into economic sustainability and higher standards of living; stressing that literature abounds on the issue of 'resources curse' and 'Dutch disease'.

In literature, there are also some theories and propositions used in explaining the casual linkage between natural resources and civil conflicts such: grievance theory (Garvin and Hausmann, 1996); weak states' theory (Fearon and Laitin, 2003, lawal, 2006, Mahdeyy, 1970); Separatist Incentive hypothesis (Rose, 2003; Collier and Hoeffler, 2002 and Le Billion, 2001); and looting hypothesis (collier and Hoeffler, 2002). Utomi (2003) argued that like the case in Bostswana, the government of Nigeria should create a 'future fund' into which the country made a mandatory deposit of every income earned above and 15 per barrel of crude oil; stressing that this is beyond the stabilization of the value of the country's currency, but sterilization" i.e. if Nigeria is to make progress, it must be forgotten that she earns oil money. Apart from these oil wealth failures, there was also the problem of capital flight, in the form of funds used in servicing the industry's operations. There was therefore an urgent need to deregulate and liberalize the industry, especially the downstream sector to enable indigenous entrepreneur with experience to come in and fill the gap that was evident (Okolo, 2006). Therefore, in early 2000, the government decided to introduce the local content policy.

The term local content (LC) aptly christened 'Nigerian content' is defined by the Nigeria National Petroleum Corporation (NNPC) as "the quantum composite value added or created in the Nigerian economy through the utilization of Nigerian human and material resources for the provision of goods and services to the petroleum industry (NNPC website, 2008). While it can be argued that this definition seems more of a text book definition rather than a practical one; Chief Tony Obuaya, one of the leading voices in the clamour for higher local content, view local content (LC) from the perspective of value additions. He defines local content in two ways: 'a set of deliberate orientation and actions to build domestic capacity relevant for service and product delivery comparable within that industry" and "an opportunity to locally build a sustainable culture of service quality and capabilities exceeding customers expectations and comparable to international standards through key local personnel's and management (Obuaya, 2005) these definitions tend to be more precise, with emphasis placed on certain key indices, which provide insight into how the local content policy can be measured and examined as an academic concept. This position was comoborated by the Chairman of Nigeria's House of Representatives committee on petroleum (upstream), to have stated that local contents means different things to different people the common denominator is value addition in the country Business Day, 2008 cited by Ugwushi, 2010).

The concept of local content is neither new nor restricted to Nigeria, as it has for long been operated in several other oil producing countries. Warner (2007) view local content (LC) from an angle of 'community content'; states that 'ultimately, community content is about realizing a competitive advantage for an oil and gas development company in the eyes of both the local population and the country's guardians of economic policy. He observed two distinct policies for achieving higher local content vis-avis; firstly, where the state requires oil companies to give greater preference to those nations and national supplier who can compete internationally on cost, quality and timeliness i.e. what can be termed local content participation. This policy is implemented through negotiated conditions and agreements between host countries and multinationals evidenced by issues such as lower pre-qualification and tender appraisals criterial and lower tariffs on imported machinery and semi-finished materials not available in the country. For instance the Trinidad and Tobago case, where oil production operators "shall give preference to national subcontractors where such are competitive with foreign bidders in skills, availability and price and meet technical and financial requirements" and the case in Nigeria where the proposed local content bill requires about 95 percent managerial and supervisory positions, 100 percent risk insurance and legal services to be handed by indigenous professionals (Warner 2007 cited by Ugwushi, 2010).

The second policy strategy is where governments propose a 'step change' i.e. gradual change of local content capacity achieved by consciously building the capability of national and local skills to access opportunities, considered as local capability development (Warner 2007 cited by Ugwushi 2010). It can be argued that while the former strategy can be considered more of a "push" model the latter is more of a "pull model"; and that the latter Model is a potentially more progressive model that would involve considerable understandings from the oil companies such as providing direct and prolonged assistance to indigenous firms to improve their quality and reliability; payment of premiums or subsidies to overcome some of the higher costs incurred in capacity development; payment of additional insurance premiums to support local supplies and contractors' investing in

physical infrastructure such as building and utilities; and providing financial services such venture capital, credit guarantees and short term loans to local supplies and contractors. Warner (2007) further stressed that we should not be so naïve as to expect changes in local content and community investment practices to occur in the absence of the right dedicated incentives.

However, we agree that while the latter model appears more progressive, it is worth considering that the multinational oil companies are not charity based firms; but strictly profit-oriented organizations, driven by the main objective of maximizing shareholders funds. Therefore, the model suggested by Warner may be difficult to implement, especially in a country like Nigeria where her recent experience from the issues of gas flaring profitability has displayed laissez faire attitude on the part of the multinational and ineffective regulation from the authorities. We therefore suggest an effective local content policy that would be driven by an optimal balance of both incentives and strict regulations.

### **Local content policy in Nigeria**

The Nigerian oil and gas development law 2010 defines local content as “the quantum of composite value added to or created in Nigeria through utilization of Nigerian resources and services in the petroleum industry resulting in the development of indigenous capability without compromising quality, health, safety and environmental standards”. It is framed within the context of growth of Nigerian entrepreneurship and the domestication of assets to fully realize Nigeria’s strategic developmental goals. The scheme, which has the potential to create over 30,000 jobs in the next 5 years, is geared to increasing the domestic share of the \$18 billion annual spending on oil and gas from 45% to 70%, in addition to enhancing the multiplier effects on the economy, through refining and petrochemicals.

The local content policy action started in 1971 through the establishment of the Nigerian National Oil Corporation, (NOC). NOC was established as a vehicle for the promotion of Nigeria indigenization policy in the petroleum sector. It later became Nigerian National Petroleum Corporation (NNPC) in 1977 through NOC’s merger with the petroleum ministry. NNPC flagged off the actual local content initiative through acquisition of interests in the operations of the International Oil Companies (IOCs). These interests grew to about 70%, with the responsibility of controlling all acreages and other activities.

Although conscious efforts were made in the past through regulation 26 of the 1969 Petroleum Act, enforcement of local content policy, the springboard for sustainable economic transformation of Nigeria, was mere paper work. For an industry that contributes 80% of Nigerian government revenues and 95% of its foreign exchange this is entirely unacceptable to the Nigerian government hence the clamor for change.

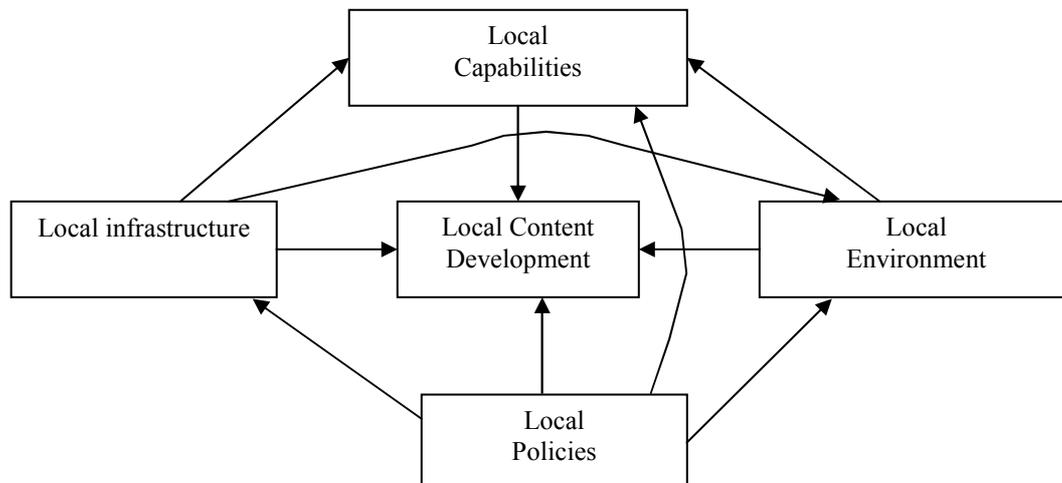
### **Local Content Policy Objectives**

Government’s objectives for the local content policy initiative are quite noble but have remained unrealized. These objectives include the expansion of the upstream and downstream sectors of the oil and gas industry, the diversification of the sources of investment into the sector such that some of the funds would begin to come from local sources, the promotion of indigenous participation and the fostering of technological transfer. Other objectives are the increase in oil and gas reserves through aggressive exploration; employment generation for all categories of Nigerians; increased production capacity, and perhaps most importantly, the integration of the oil and gas industry into the mainstream economy through local refineries and petrochemicals.

### **Local Content Development Model.**

The local content development model has arrived to incorporate all important factors, which impacted the development of local content development in the extractive industry. Such relevant factors are categorized into the following; local policies, local infrastructure, local environment and local capabilities which all impact local content development variables.

Figure 1: model for local content development in extractive industry.



Source: Abolfazi, and Behrouz, (2012)

Figure 1 illustrates the model on how the developed factors interact to create value for the host extractive industries, local content development is in the center and the four affecting factors have surrounded it. The hypothesized casual paths between each factor are depicted by arrows.

The variables included in the local policies factor were found to have direct impact on local infrastructure factor variables. Therefore the link from local policies to local infrastructure was drawn.

1. **Local Policies:-** local policies are concentrated in a range of economic sectors including extractive industry. These policies include public and industrial policies, which are conceived with sustainable economic development. The public inputs to any production process tends to require a number of coordinated policy reaction, so they are often more extensive than assumed (Hausmann and Rodrik, 2006). Public policies will generate more forecasted macroeconomic environment, increase the reliability of institutions and the legal system, provide incentives to enhance sound business practices, generate more-enabling infrastructure for business development, and enhance social structure, which would contribute to inclusion and participation (INSTSOK, 2003). Public policies can execute different functions such as establishing company registries, appointing norms, enforcing contracts, laws and strategies, and providing infrastructure aligned with planned local content objectives. It is necessary for the government to increase local skills, business know-how, technology, capital market development, wealth capture and wealth distribution to create the condition for domestic companies to emerge (Tordo et al, 2011).

Industrial policy constitutes a vital part of government policies. Industrial policy has to primarily focus on the efforts, which could facilitate the participation of locally owned firms in the domestic petroleum activities, competitively.

2. **Local Infrastructure:-** the availability of certain conditions such as information technology, local company's needs, standards, social, education etc. in the local extractive industry is the primary concern of local infrastructure factor. Because providing and maintaining the necessary infrastructure would add to high level of social welfare. Infrastructure is definitely an important variable, which has a substantial impact on local content development (Klueh et al, 2007).

The collaboration between the government of the host country and the major players in the extractive activities ought to be focused on how to involve domestically-based companies with local labor. Attention must be on how to facilitate their participation in the domestic petroleum activities without compromising quality, health, safety and environmental standards (Heum et al, 2011). Public utilities like roads, railways and air transport, telecommunications electricity and water supply as business development infrastructure can create an environment, which enables for business development and productivity.

3. **Local Environment:-** local environment is the factor in which all local policies, local capabilities, local infrastructure and the interaction among other factors are formed. One of the important variables is the macroeconomic environment, which is decisive for the factors, which are necessary for any investment decisions such as development of domestic prices, the exchange rates for the local currency, and the interest rate. Some particular government policies impact the environment for investment and business development. Encouraging competitiveness develops competitive oil and gas based industry.

This environmental context is essentially the same for any country with ambitions to develop oil-related businesses (INSTSOK, 2003). For instance, in early 1990s; the UK's government in the content of strengthened relationship with European Union, moved its focus from promoting local content within the UK offshore oil and gas industry to help private investors develop export markets in a competitive environment (Klueh et al, 2009). It is necessary to make sure that the leading international firms continues to choose to participate in the domestic industry, because local content requirements identified in other industries seem to create a business environment that is most attractive to less efficient, high-cost investors.

4. **Local Capability:-** local capabilities include education, skills and expertise development, transfer of technology and know-how and an active research and development portfolio within manufacturing and services of local companies (ministry of energy of republic of Ghana, 2010). Industrial growth is not something which could be decided by politicians but it is a result of demanding interplays between established and emerging industrial capabilities (Heum et al, 2011) developing local content in the extractive industry must be based on existing capabilities within manufacturing, fabrication, and services. According to Nordas (2003) local policies have to appreciate and encourage foreign firms to collaborate with local companies. In turn, this should be expected to give impulses and create dynamics, which would have positive influence on the development of indigenous firms.

5. **Local Content Development:-** the level of local content development depends entirely on the quality of relationships among political, infrastructure, environmental and local capability factors and the results are economic growth, industrial growth and spillover impacts.

Local content will make its contribution effectively to the host country economy by creating and developing value added activities and competitiveness by international standards. The past experience of economics of many developed and developing countries indicate that linkages between the primary resources sector and other sector impact economic growth. Significantly, Thus, if the linkages are strong enough such as when inputs are not supplied from abroad, the economy gradually becomes diversified (Heum et al, 2011).

Industrial growth is the second impact of local content development and it is also an industrial task, which offers opportunities for the oil industry to strengthen profitability from its operations in host countries with large oil and gas resources. It is for indigenous firms to expand, as for foreign companies to establish facilities for manufacturing and service production, locally. It is also a requirement to succeed within a policy in enhancing industrial development by increasing local content in the local petroleum activities.

Spillover is considered as another local content development influence where local content development will move highly spin off positively to industrial development in other areas of the economy as well, that is, industrial sector other than oil and gas based industrial should take advantage. Local content in the extractive industry should not be seen as an end in itself. It is a technique to develop business, which could compete for contracts in upstream oil and gas, in domestic and abroad, which may have positive spillovers even to non-petroleum based industry (INTSOK, 2003).

### **Challenges of Managing Local Content Policy in the Extractive Industry**

Omenikolo and Amadi (2010) identified the following as the challenges of managing local content in the extractive industry:

- Lack of a stimulating government regulatory framework
- Deficient infrastructural facilities
- An improved educational infrastructure is needed
- Lack of adequate finance, insufficient pertinent technical expertise and unhelpful multinational company's attitude are impediments that should be removed.
- Corruption and mismanagement or Opaque accountability.
- Unstable and even volatile political and economic environments in Nigeria
- Lack of appropriate materials

Nwapa (2007), identified the following challenges of managing local content in extractive industry:

- Internal inconsistencies in view of strategies and focus across the project life cycle, and insufficient internal and external design and execution capacities and capabilities.
- Shortage of adequate or appropriate industrial skills in local community to meet company needs.
- Pre-requisite of ensuring access to basic services and infrastructure by communities, particularly in remote areas.
- Weak enforcement of social and environmental standard among local businesses.

- Complex procedures and costs for small –to medium sized local business associated with procurement prequalification requirements.
- Local content requirements that exceed local industry growth potential and contribute to unintended negative consequences in economic and social development.
- Insufficient coordination with internal and external stakeholders, and the absence of transitioning and exit strategies.

### **Managing Local Content Policy Impact in the Extractive Industry**

In managing local content impact in the extractive industry the following steps should be taken (Ibilola, 2011):-

- Ensure effective transfer of technological know-how from expatriates to local indigenes through technical services contracts, strategic alliances, technology transfer agreements, on-the-job training overseas, cross-posting, the establishment of joint ventures.
- Bridging the gap between the oil and gas industry and academic in critical. The absence of link between research and development (R&D) needs of the industry and services provided by Nigerian educational institutions, such as the Petroleum Training Institute (PTI), Federal University of Petroleum Resources (FUPRE), NNPC-R&D, Institute of Petroleum Engineering in the University of Port Harcourt, seems to contribute to the vacuum in technology and knowledge transfer.
- Ensure the enforcement of the obligation to obtain insurance policies in Nigeria in order to build insurance capacity on local companies.
- The current situation where marine activities are primarily controlled by foreigners has led to Nigerian Content Development and Monitoring Board (NCDMB) setting a target of increasing the percentage of Nigerian flagged vessels and addressing the gaps in local contract ownership.

### **Outcome to Be Achieved Through Managing Local Content Policy**

If managed effectively, local content programmers offers an opportunity for companies to meet business needs for more efficient supply chains while maximizing development benefits by helping local companies grow and become competitive, as well as raising household. Outcomes, all of which have a number of multiplier effects. Some of the potential outcomes that can be achieved through local content are grouped into commercial value and sustainable local benefits.

#### **Commercial Value Outcomes**

- Reliability of supply and cost efficiencies through local sourcing and close proximity to supplier structures;
- Social license to operate and improved relationships with host communities.
- Greater value of community investment resources.
- Strategic relations with host governments and government authorities.

#### **Sustainable local benefit outcomes:**

- Long-term employment opportunities by building transferable skills sets in local communities
- Growth of competitive and commercially sustainable business-potential for additional supplier/customer relationship
- Multiplier effect through sustainable economic growth and spending in communities.

### **Government's Efforts**

The Nigerian local content initiative did not take off until recently. The Obasanjo administration's renewed efforts at making a difference in the appalling state of Nigerian content were evident in the privatization of the Nigerdock and the repositioning of the Nigerian Petroleum Development Company (NPDC), an arm of NNPC. Already the privatization of Nigerdock has proved the company's capability as a serious player in emerging deepwater offshore activities with its success story in constructing the Bonga Buoy (the world's largest).

Another milestone recorded in the effort at growing the nations local content level is the Globe star yards fabrication of the jacket for the Amenam platform, Saipem yard's Okpoho platform and ChevronTexaco's Meren-X well jacket and helipad fabricated by Transcoastal Nigeria. These developments have helped to create jobs, build capacity and stimulate the nation's economy.

Fabrication is probably the most developed manufacturing area in the Nigerian petroleum industry. For several years, many structures and parts have been fabricated in yards located mainly in Warri, Lagos and Port Harcourt. This has come to stay, but it suffers a number of limitations. Limited capacity installation and technological innovation could continue to plague the industry even as it is striving to mature into relatively more demanding deepwater fabrication.

Transportation in the oil and gas industry covers road haulage, marine transportation and pipeline transmission. Airline transportation relating to the industry is still firmly in the hands of foreign companies. Local and international companies are active in marine transportation services for swamp and offshore operations. Road haulage is the most popular means of transportation for onshore operations because of the poor state of rail

transportation in the country. The full implementation of the cabotage law is, therefore, expected to provide more opportunities for local participation.

Investment in Nigeria's oil industry currently amounts to about \$18 billion annually. This investment trend is expected to continue annually beyond 2013. The creation of the Nigerian content support fund is timely. This fund is designed to operate a free zone concept and provide working capital for local companies, thereby bringing down the cost of funds.

Post consolidation, Nigerian banks as syndicates have offered between \$200 and \$600 million in \$1.2 billion projects. Other projects have been solely funded by Nigerian banks with no international participation. Pre-consolidation, Nigerian banks were offering \$60 million participation in \$1.0 billion of the oil majors' key projects.

Based on the directives of the NNPC, Nigerian engineering and service companies, as well as fabrication yards have invested hundreds of millions of dollars on skill acquisition and enhancement, and capacity expansion. Yet despite all these efforts, bottlenecks in the system still prevent meaningful fabrication work being awarded to Nigerian firms. If these projects are awarded to the existing Nigerian yards not only can they demonstrate their ability to deliver to international standards of quality and safety but they also can substantially build long-term industrial capacity, provide employment and global competitiveness which is currently in the hands of the overseas yards.

Perhaps government's most outstanding effort so far is in the development of a unique blueprint for the successful implementation of a Nigerian content policy in the oil and gas industry. This policy is referred to as the Nigerian Oil and Gas Development Law 2010. One of the outstanding features of this blueprint is the conceptualization of a proper definition of Nigerian content, which enjoys general acceptability in the industry. Going by this definition the mistake of confusing local front with local content will be substantially reduced as local content seeks to reward local investment and competence at the expense of mediocrity. This policy, which makes it imperative that exclusive consideration be given to Nigerian indigenous service companies which demonstrate ownership of equipment, Nigerian personnel and capacity to execute jobs in the Nigerian oil and gas industry, is fashioned after the Norwegian model. It presents a template for companies' classification and a value matrix to measure local input. It also spells out the responsibility of the respective institutions charged with the effective delivery of the Nigerian content.

### **Recommendations**

The high cost of funds is a factor that jeopardizes indigenous extractive industries' ability to compete effectively with their counterparts from Europe and the United States, who are well endowed with capital. This outward development has reduced Nigerian banks. Not yet cut out for long-term projects and with a penchant for quick business and immediate returns, to mere 'cash centres'.

Policy makers in Nigeria's extractive industry must seriously consider the idea of establishing a strong energy bank that would empower local contractors/investors. This would increase their level of participation and give them the necessary experience that would engender technology transfer.

Technology transfer should be well programmed and aggressively pursued if economic, military and political advantages are to be guaranteed. So far an increased number of Nigerians in managerial and professional positions in firms involved in upstream and downstream operations has been observed. However, the evidence of technology transfer is yet to be seen. Nigeria, therefore, needs her own unique strategy of technological progress pursued with all seriousness if Nigerians are to make any meaningful impact soon.

Another factor that made nonsense of past efforts at improving local content (and is still a challenge to current efforts) is the nation's inability to develop her infrastructure. Coupled with this is a lack of a sound iron and steel industrial base, lack of foundries and effective machine tool manufacturing. These are all part of the fundamental challenge, which the government must address through its privatization programme.

Government must remove the inconsistencies in the local content act, sincerely respect the local content blueprint and follow it carefully, especially in the awarding of contracts for deepwater and other projects in the oil industry. Such a policy should ensure that the refining sector and indeed the whole of the downstream sub-sector is commercialized and further opened to private sector participation. It should also ensure that the country's existing refineries run efficiently. This will be best achieved if core investors are brought in to acquire majority shares in the plants and to take over their management, following Indorama/EPCL, Nigeria. The policy should pursue the active participation of the private sector in refining, with investors encouraged to set up refineries aimed largely at the export market.

A strategic objective of the local content policy should be to get exploration and production companies already active in the Nigerian upstream, and new entrants, to be committed to downstream business including the development of energy infrastructure and assets. The concept of extended enterprise (virtual integration, outsourcing, collaborative R & D), in short, networking must also be emphasized.

More investments would have to be channeled into the gas sub-sector. More projects utilizing gas to produce energy-based derivatives such as the Escravos Gas-to-Liquids project and the Natural Gas Liquids project are required. Policies in the Gas Master Plan must be pursued vigorously.

The Nigerian Content Consultative Forum (in charge of networking in the oil and gas industry), the Nigerian Content Division (an arm of NNPC) and the newly created Nigerian Content Development and Monitoring Board, NCDMB. (charged with the responsibility of strictly enforcing compliance) must work in tandem for the success of the local content policy.

Historically, the factors which have created the chasm between policy substance and implementation are mainly inadequate think-through, weak institutional capacity, absence of the required political will to carry through change, lack of support from relevant stakeholders and corruption. The NCDMB should not be allowed to become captive to such factors.

Finally, the sincerity of government about the local content issue must be reflected in attractive fiscal policy (see Ghana) or measures such as reduction in import duties for steel and chemicals and other consumables as well as tax holidays for indigenous oil and gas and related firms, all of which may gender a competitive spirit in our local fabrication yards.

### Conclusion

The present state of Nigeria's needs is a clear indication that a responsible and dynamic approach to sustainable local content development needs to be adopted by government policy makers and upstream operators to guarantee a better future for the nation's extractive industry. Technological development does not occur just by chance; rather it is a product of a nation's sound economic management, policy reengineering, good governance and a social value system that rewards hard work and creativity.

Having a few companies committed to Nigerian content and pursuing local content programmes is not enough. Support for local content policies must be nation-wide. It must be accepted by all and should become embedded in every operator's business philosophy.

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