Since the 1960s till date, the Nigerian Oil and Gas Industry have continued to play a key role in the country’s economic growth and development. The sector generates about 95 percent of total export revenue and 80 percent of her total national income. In addition, it expends about $8 billion annually in servicing its operations. Sadly, a significant proportion of this amount is paid to foreign contractors for services like fabrication and engineering procurement; resulting into capital flight and leaving very little to developing the country’s industrial base. Similarly, the government introduced the ‘Local Content’ (LC) policy, aimed at championing the course for higher indigenous participation in the sector and value addition for the nation. One of the major thrusts of the policy was to promote higher participation of Small to Medium-sized firms within the industry. We present findings from multiple-case study conducted on two SMEs, with the aim of exploring the policy implications on their operations. The study reveals that while the policy has achieved very little success in enhancing more contract awards to local firms and spurring few joint venture arrangements; nevertheless, issues such as ineffective supervision, cumbersome prequalification requirements and inadequate financing, still hinder the policy efficacy.

INTRODUCTION AND THE PROBLEM STATEMENT
The Oil and Gas Industry (OGI) in Nigeria plays a crucial role to the sustenance of the nation and fuels her economic and development activities. The industry has been widely described as the nation’s live wire and literature abounds on its role and significance in Nigeria (Agusto, 2002; Atakpu, 2007; Odulari, 2008). Nonetheless, an estimated $8 billion is spent annually on servicing the industry in operations such as fabrication, engineering procurement, construction (EPC), Front End Engineering Design (FEED), conceptual designs and seismic studies. This figure is projected to hit $15 billion within the next few years (Business Day, 2008). Regrettably, despite these huge sums of money spent in servicing the industry, only a very little proportion of the accruable profit is spent in Nigeria. Majority of the amounts are repatriated abroad, where most of the equipment are manufactured; and providing employment opportunities for citizens of other countries. The major reason for this situation has been attributed to low local content (LC), which is a situation where most of the service contracts are awarded to foreign firms because local indigenous firms lack the requisite skills, technical expertise, manpower and production capacity and capability to compete favourably. Oladele (2001) posited that low LC in the Nigerian OGI results from: Deficient capitalisation arising from the tendency of Nigerian entrepreneurs to operate as ‘one man’ businesses; Capital and structural deficiencies associated with poor training and low managerial ability; and Inability to attract funds due to lack of suitable collateral and positive corporate image. Aneke (2002) and Heum et al. (2003) expanded the above reasons for low local content in Nigeria to include: low technological capacity; lack of funding from financial institutions; inadequate and incoherent policies/legislations; inadequate infrastructure; unfavourable business climate; lack of partnering between indigenous contractors and technically competent foreign companies. Olorunfemi (2001) and Ogiemwonyi (2001) in similar papers also articulated the problems to the inability of commercial banks to provide tenured loans to indigenous firms to execute projects and that of Nigerian
firms to foster appropriate alliances and partnerships with foreign firms, stressing that these collaborations needed to be facilitated by the government and the multinational oil producing firms, respectively.

Historically, Nigerians have had very little share of the country’s oil wealth and there was an urgent need to reverse this trend in the wake of the country’s return to democracy. To address this anomaly, the Federal Government of Nigeria in the early 2000s introduced the Local Content (LC) policy, christened Nigerian Content (NC) and it was primarily aimed at enhancing increased participation of local indigenous firms in OGI. The policy was targeted at transforming the industry through the development of in-country capacity and indigenous capabilities in the area of manpower development, facilities and infrastructure towards ensuring that a higher representation of local indigenous companies participate actively in the industry (Lawal, 2006; MacPepple, 2002 and Nwapa, 2007). It was also aimed at reforming the industry into becoming the economic hub for promoting higher SMEs participation, job creation and base for industrial growth; as well as for checking capital flight away from the country (Binniyat et al, 2008; Chukwu, 2005 and Gilbert, 2007). The crucial need for this policy cannot be overemphasised and even in recent times, the speaker of Nigeria’s House of Representatives has been quoted as saying:

“It is important to note that while the oil and gas industry clearly dominates the Nigerian economy, a successful local content policy must be apart of a comprehensive industrial and economic growth strategy for Nigeria as a whole… it should include both a plan for domestic capacity building and infrastructure development to broaden the national industrial base…” (Ogbodo, 2008).

SMEs on their own part have been widely identified as the back-bone, key drivers, engine-rooms and catalysts of the economic development of most countries (Ariyo, 1999; Day, 2000; Ihuu, 2005). They constitute a major proportion of all the businesses in most countries and play salient roles in the area of wealth creation, provision of products and services, job creation, enhancement of better standards of living and contributing to the GDP of many countries (OECD, 2000; Okpara, 2000). Heum et al, (2003) highlighted certain promising areas where opportunities exist in the industry to include: Fabrication and construction; Well construction and completion; Modification, maintenance and operations; Transportation; Control systems and ICT; Design and engineering; and Consultancy. Similarly, it was expected that the LC policy would promote higher participation of small to medium-sized firms to take advantage of these opportunities; and therefore enhance value addition to the nation. However, over the past few years there has continued to be mixed reports and speculations among industry regulators and other industry stakeholders, like the media, as to the efficacy Local Content policy in meeting up with its policy aims and objectives of enhancing local indigenous participation in the Nigerian Oil and Gas Industry. The initial target of NNPC was to achieve 45 percent by the end of 2007 and 70 percent by 2010. NNPC in 2008 reported that as a result of the policy, LC has increased to between 35 and 40 percent; however, the media refuted that report by saying Nigeria has only achieved about 20 percent LC. It is not sure how the two sides measured the policy and generated the results; nonetheless, a better was of appraising the policy would be to assess its impact on different industry stakeholders.

In the light of the above, this paper is part of an extended study attempting to appraise the efficacy of the LC policy; and how it has been able to add value to the economy, create jobs, develop local infrastructure, stimulate higher participation of SMEs and enhance the utilisation of local human and material resources; especially within the oil producing Niger Delta region. This paper specifically focuses on how the LC policy has impacted on small to medium-sized oil servicing firms operating within the oil and gas industry and data was collected using the multiple-case study method, from two case companies. This study is made up of five sections - section one provides an introduction into the research problem; two presents background to the study and some literature on local content; three provides the research
method; four analyses and discusses the results; and the final section concludes the study and provides some implications for further research.

BACKGROUND & LITERATURE
The Nigerian Economy and the Oil and Gas Industry

The Nigerian oil and gas sector plays a very dominant role in the nation’s economy with over 90 per cent of the nation’s foreign exchange earnings coming from the sale of crude oil. Nigeria is Africa’s most populous, resource rich country with a population of about 140 million. It is made up of over 250 ethnic groups and chequered in the past by incessant political instability, bad governance, inadequate infrastructure and macro-economic mismanagement (Atakpu, 2007). Nigeria has about 36 billion barrels of crude oil reserve 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). Besides the large crude oil and natural gas deposits there are also deposits of gold, tin, talc, gemstones, kaolin, bitumen, iron ore and barites that can be harnessed to earn foreign exchange for the country; oil and gas remains the country’s major source of foreign exchange earning and revenue base (Adebola et al, 2006).

Indeed, over the years, oil has become the main stay of the Nigerian economy as the earnings from crude oil are used for infrastructure developments as well as improving the socio-economic well being of Nigerians (Agusto, 2002). The Nigerian government earns income from oil through the sale of crude, gas; Petroleum Profit Tax (PPT), royalties and rent (from the industry operators). Activities in the oil and gas industry are classified into the Upstream and Downstream sectors. Three major business arrangements are operated in the industry, vis-à-vis: Joint Ventures (JV) i.e. Joint Operating Agreements (JOA) between the Federal government and multinational operators such as Shell, Agip, Chevron and Elf; Production Sharing Contract (PSC) i.e. arrangements between the government and operators, where NNPC acts as concessionaire, usually in the deep offshore operations where the operator funds exploration, development and production activities and revenues are shared between both parties; and Service Contract (SC) i.e. where Oil Prospecting License (OPL) title is held by the NNPC while the operator designated as the service contractor provides all the funds required for exploration and production works. In the event of a commercial find, the contractor recoups its cost in line with the procedures stipulated in the contract. The difference with the PSC is that while the SC covers only one OPL, the PSC may span more than two or more OPLs at a time. Also, the SC covers a fixed period of five years and should the effort result in no commercial discovery, the contract automatically terminates. Only Agip Energy and Natural Resources (AENR) operate SC (NAPIMS) (Agusto, 2002; 2004). In addition, Ariweriokuma (2009) broadly divided the sector into two, vis-à-vis the upstream and downstream oil and gas activities. Upstream oil and gas activities involve operations in the areas of Exploration and Production (E & P) of oil as well as services that lead to these E & P activities i.e. from drilling the initial appraisal wells, through seismic data processing, to drilling of wells and extraction of crude oil, condensates, natural gas or associated gas from the well (Nwosu et al, 2007). The Nigerian government is a major investor in the production activities of the upstream sector and her activities are co-ordinated mainly by the NNPC, which has shares in the major upstream activities. The downstream oil and gas activities involve refining the products from crude oil, and distribution until it reaches the final consumer. There are three main functional areas within the downstream sector - refining, distribution and marketing of petroleum products. The downstream sector is of strategic importance to the nation, as petroleum products constitute a key source of energy used for various purposes (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 the oil wealth and environmental degradation resulting from exploration activities have been identified as key factors aggravating actions from environmental rights groups, inter-ethnic conflicts, and civil
disturbances from ethnic militias such as the Movement for the Emancipation of the Niger Delta (MEND) and Niger Delta Vigilante Force (NDVF) (NDCC Report). Warner (2007) noted that like the Nigeria 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 ‘resource curse’ and ‘Dutch disease.’ In literature, there are also some theories and propositions used in explaining the causal linkage between natural resources and civil conflicts such: ‘grievance’ theory (Gravin and Hausmann, 1996); ‘weak states’ theory (Fearon and Laitin, 2002, Karl 1997; Mahdavy, 1970); ‘separatist incentive’ hypothesis (Ross, 2003; Collier and Hoeffler, 2002, and Le Billion, 2001); and ‘looting’ hypothesis (Collier and Hoeffler, 2002). Apart from these oil wealth failures, there was also the problem of capital flight from the country via monies used in servicing the industry and the cause for this was attributed to the issue of low local content in the OGI. There was therefore an urgent need to deregulate and liberalise the downstream sector to enable indigenous entrepreneurs with experience in the oil and gas sector to come in and fill the gap that was evident (Okolo, 2006). As such in the early 2000s, the government decided it was time to introduce the local content policy.

Local Content Policy in Nigerian Oil and Gas Industry

The term Local Content (LC) aptly christened ‘Nigerian Content’ has been defined 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). This definition seems what can be termed a textbook definition for LC. However, according to the Chairman Nigerian House of Representative Committee on Petroleum (Upstream), Tam Brisibe, “Local content means different things to different people…the common denominator is value addition in the country” (Ogbodo, 2008). Obuaya (2005), a leading voice in the clamour for higher participation of local companies in the industry, provided his definitions in line with this idea of ‘value addition.’ He defines LC as: ‘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 and management.’ Though simple, Obuaya’s definitions reflect on some important indices to examining the concept of LC such as ‘deliberate orientation’, capacity building, sustainable capability, product deliverability systems and comparability.

The concept of local content is global and not restricted to Nigerian, as it has previously been undertaken in several other oil-producing countries. Warner (2007) views LC from an angle of ‘community content’; stating that “Ultimately, community content is about realising 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 further observed two distinct public policies strategies for achieving higher local content targets stand out vis-à-vis: the first strategy is where the state requires oil companies to give greater preference to those nationals and national suppliers 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 criteria and lower tariffs on imported machinery and semi-finished materials not available in the country. This model is illustrated in 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 LC bill requires about 95 percent managerial and supervisory positions, 100 percent risk insurance and legal services are to be handled by indigenous professionals. The second policy strategy is where governments propose a “step change” i.e. gradual change of LC capacity achieved by consciously building the capability of national and local skills to access opportunities, considered as ‘local capability development’ (Warner, 2007). It can also be argued that while the former strategy can be considered more of a “Push” model; the latter is more of a
“Pull” model. Warner (2007) considers the latter is a potentially more progressive model that would involve considerable undertakings 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 suppliers and contractors; investing in physical infrastructure such as buildings and utilities; and providing financial services such as venture capital, credit guarantees and short-term loans to local suppliers and contractors. He 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 argue that although the latter model sounds laudable; nevertheless, it is important to consider that multinationals are not charity organisations; but strictly profits oriented organisations, driven by the goal to maximise shareholders funds. As such, the model suggested by Warner (2007) may be difficult to apply. We therefore posit that for a country like Nigeria, an effective LC policy would need to be driven by an optimal balance of both incentives on one hand and strict regulations on the other. This is because, in comparison to other countries, Nigeria has very low level of local content in the oil industry operations. According to the Nigerian National Petroleum Corporation (NNPC), only about 14 percent of the amounts spent servicing the industry used to be invested in Nigeria; compared to 25 percent in Indonesia, 50 percent in Norway and 70 percent in Brazil and Malaysia. Not forgetting that the target of NNPC was to achieve 45 percent by the end of 2007 and 70 percent by 2010 (Adebola, et al, 2006; Amanze-Nwachukwu, 2007; Nwapa, 2006).

METHOD
The sample and case process - The data in this study was obtained from multiple-case study conducted on two small to medium-sized service companies operating within the Nigerian Oil and Gas industry. The case study method was adopted in this study due to the exploratory nature of the study. Case study research is an approach that successfully enhances the understanding of a complex issue and can further anchor what is previously known, while emphasising detailed contextual analyses of limited conditions and their relationships (Dooley, 2002). The two companies were recruited through personal contacts; however, they were selected because they fit the conditions of having been in business for up to 5 years before the introduction of the LC policy and they had staff strength of less than 250 as provided by guidelines of the Small and Medium Enterprises Equity Investment Scheme (SMEEIS) in Nigeria. This definition of SMEs was adopted by the researchers to simplify the nature of the study. In conducting the study, two cases were chosen to avoid “putting all our eggs in one basket”; to gain from the insights and robustness of the case comparison; and to allay usual criticisms associated with single case study (2003). In addition, a case protocol was prepared which provided an overview of the study, field procedures, case study questions and a guide for the case study report, as suggested by Yin (2003). The unit of analysis in this study was each case company and data was collected through websites, company document, archival records and interviews with top management staff of the case companies; collected between the months of September to October 2008. For the purpose of this article, the case companies studied would be termed Alpha and Beta. Alpha is a small to medium-sized oil servicing company owned by Nigerians with long years of technical and academic experience in the Nigerian and international oil and gas business. They were incorporated in 1999 and are providers of accurate reservoir characterization, petroleum projects design, production optimization, data analyses and operations plan implementation. Beta was incorporated in 1993; but came into full operations effectively in 2000. They started out by buying stock of excess pipes from the oil companies to sell to other users in the industry. It was when the excess was mopped out they decided to start importing directly from manufacturers. Currently they represent a total of 12 manufacturers with a capacity of processing 10 million tones of steel per annum.

RESULTS & FINDINGS
Contract Awards – from the data gathered, it was found that the LC policy has led to increased opportunities for SMEs in the industry and this resulted into more contract awards in both cases;
however, this cannot yet be considered as a higher SMEs participation because there are still several bottle-necks to the awards of such contracts such as tedious pre-qualification and tender processes. Both companies believe more can still be done, because there is still a dominance of foreign owned firms handling projects which could ordinarily be handled by indigenous firms. There are also other challenges such as inadequate financing, as identified by (Oladele, 2001; Heum et al., 2003; Olorunfemi, 2001); thus stressing the need for commercial banks to do more in the area of granting single digit loans to companies and providing other services such as insurance, syndication in the case of projects requiring huge capital investments.

**Job Creation** – more contract awards leads to the creation of more jobs. In the case of Alpha, their staff strength grew from 12 to 44 and Beta witnessed a growth of 15 to 39 employees. Nonetheless, this is still ‘a drop in the ocean’ when considering the level of unemployment in Nigeria and the role small oil firms can play in reducing the rate. From the interviews conducted, the directors opined that if the opportunities in the industry are well harnessed by SMEs, it could help resolve more than half the country’s unemployment problems. Another problem identified is that of ‘staff poaching’ on the part of multinationals. Data from Alpha showed that after they have spent money training and building the capacity of their employees, they are usually poached by the bigger oil companies; as these individuals move on to seek ‘greener pastures.’

**Joint Venture & Partnerships** – Both Alpha and Beta were involved in some joint venture arrangements and it was found that apart from enhancing their ability to win bids, these partnerships also stimulated knowledge and technology transfers as well as capacity building. There were also increased man-hours in both cases and the higher capacity to meet industry standards and quality. This point was emphasised by Ogiemwonyi (2001), who stressed the need for government and Multinationals to facilitate the process of these joint ventures, partnerships and alliances.

**Local Content Act** – the lack of an Act of Parliament is still a major challenge inhibiting the efficacy of the LC policy. At the moment, the National Petroleum Investment Management Company (NAPIMS) and the Department for Petroleum Resources (DPR) generate guidelines and regulations from time to time. These sometimes result into ‘shifting of the goal posts’ at will by the regulators and tends to have detrimental effects on SMEs operating in the industry. Because once new guidelines are released, and companies start to make necessary changes in line with the guidelines another abrupt guideline may impact negatively their operations. It is believed that an Act would help streamline both the guidelines and the activities of the regulators; as well as enhance a more efficient implementation, monitoring, and realisation of the policy thrusts.

**CONCLUSION & IMPLICATIONS**

In summary, the objective of this article has been to examine the implications of the ‘Local Content’ policy on Small to Medium-Sized servicing companies operating within the Nigerian Oil and Gas industry. Although our intention is not to generalise from this study; nonetheless, we provide useful insights for future direction of the policy. We conclude that the policy has made only very little positive impact in enhancing higher SMEs participation in the industry; as such, we highlight the need for the enactment of the Local Content Act; closer supervision and monitoring of the policy guidelines by regulatory authorities; lessening the pre-qualification, tender and bidding requirements; reduction of registration fees with regulatory authorities such as DPR and NAPIMS; support for SMEs operating in the industry in terms of single-digit financing for projects; and the facilitation of quality partnerships and alliances that can enhance higher levels of technology transfer and capacity building. This paper represents only a small step towards enhancing our understanding of the implication of the LC policy in the Nigerian oil and gas industry; as such, further research would still be necessary to generate valid constructs and empirically tested models for assessing the efficacy of the policy. Also, further research can be conducted using more detailed research techniques, and on other stakeholders impacted by the
policy, in order to enhance generalisation and theory building; especially in the area of associating LC policy to tangible implications for ordinary citizens of oil producers.

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