

THE SOCIAL EFFECTS OF OIL PRODUCTION IN GBARAN UBIE, BAYELSA STATE, NIGERIA

Mathias, Bentina Alawari

Department of Sociology /Anthropology

Faculty of Social Sciences

Nnamdi Azikiwe University, Awka.

Email:bentinade1@yahoo.com;mathiasbentina@gmail.com

Abstract

The study examined the social effects of oil production in Gbaran Ubie. It examined the social, economic and environmental effects of oil production. It also highlighted the different strategies that the project used to tackle the challenges of communal disturbances which is the usual response from host communities whenever their source of livelihoods is tampered with. We used the role theory to explain why there was no report of violence in the project community. Finally, recommendations were made which include that the oil companies should look beyond the present and train personnel on new technologies such as cleaning water ways and reclaiming vegetation.

Key words: Oil Production, Oil exploration, drilling, construction, host community.

Introduction

The origin of petroleum exploration and production dates back to 1906 in the Middle East precisely in Iranian city of Kubai (Osborn 1927). In Nigeria, petroleum exploration began in the Niger Delta region in Oloibiri, a village in the present day Bayelsa State in 1956. It is in record that the Niger Delta of Nigeria is among the richest deltas in the world. Other major deltas are either famous for crude oil and natural gas like Amazon in Brazil, Orionoco in Venezuela, Mississippi in the USA, Mahakarn in Indonesia or for growing mainly rice like Indus in Pakistan, Ganges in Bangladesh, Mekong in Vietnam.

The Niger Delta however has huge oil and gas reserves and ranks as the world's sixth largest producer of the crude oil and largest producer of palm oil after Malaysia which obtained its palm seedlings from Nigeria (Conservation and Development of the Niger Delta Report 2004). Since pre-colonial days, the Niger Delta has played a crucial role in the economy of the country. Its ports and rivers provided access for the British to penetrate the Nigerian hinterland; the gate way for the trade on slaves and later export commodities such as palm produce, timber, rubber and even groundnut and cotton from the distant Northern parts of Nigeria (Mathias,2005).

Oil production however has adverse effect on the host communities. Production involves drilling and construction. Oil production has more impact on the communities than oil exploration (Ikelegbe, 2006). Gas flaring is an aspect of production process which consequently encourages air pollution which results from processing, evaporation and flaring. In the same vein, production generates heat which destroys vegetation around the heat area, suppresses the growth and flowering of plant. It also reduces agricultural productivity and

wild life concentration in the area. Oil spillage is another aspect which has negative effect on the communities. In as much as it destroys farm lands, fisheries, aquatic resources and mangrove ecosystem, it also creates social tension due to compensation disagreements (Orubu, 2002)

Oil production in the Niger delta is usually characterized by unrest due to environmental degradation since the rural populace depends totally on agriculture, fishing, forestry and wild life exploration for their livelihood. The impact of oil exploration on their environment directly or indirectly results in aggressive response.

The Gbaran Ubie project has different responses from the communities. Gbaran Ubie project is the biggest onshore construction project to be executed by Saipem in Nigeria. The project is located in the heart of Niger Delta region in Bayelsa and River State. The HSE Newsletter (2007) recorded that the Gbaran Ubie Integrated Oil and Gas Development Project (IOGP) is initiated by SHELL to supply natural gas to the Nigeria Liquefied Natural Gas (NLNG). In pursuance to this, Shell Petroleum Development Company (SPDC) awarded Saipem Contracting Nigeria Limited and the Engineering Procurement And Construction (EPC), contract for the installation of pipelines, flow lines and intersite cables for the project.

The project is near completion and there is no record of violence in the site but the question then is what is the secret behind this great success? This paper attempts to study the Gbaran Ubie project with interest on the social effects of the project on the host communities.

Objectives of the Study

The specific objectives of this study are:-

1. To examine the scope of the Gbaran Ubie project
2. To highlight the secret behind the success of the Gbaran Ubie project.
3. To outline the social effects of the Gbaran Ubie project on the host communities.

Theoretical Exploration

The role theory is used to explain the study. Role theory points that human behaviour is guided by expectations held both by the individual and by other people. The expectation corresponds to different roles individuals perform in their daily lives such as secretary, father or friend. For instance, mostly people hold preconceived notions of the role expectation of a secretary which might include answering phone, making and managing appointments, filling paperwork and typing memos. These roles would not be expected of a soccer player.

The Niger Delta region has a serene and calm environment. The inhabitants of the Niger Delta region are farmers and fisherman. The activities of the oil companies affected their economic activities in that the water and the land were polluted as a result of oil spillage and drilling activities. The role theory went further to state that if we have information about the role expectations of a specified position, a significant portion of the behaviour of the persons occupying that position can be predicted. The people were comfortable with their occupation and environment until the coming of the oil companies. Role theory argues that in order to change behaviour, it is necessary to change roles: roles correspond to behaviours and vice versa. In addition, to heavily influencing behaviour, role influences belief systems and attitudes: individuals will change their beliefs and attitudes to correspond with their roles. Many role theorists see role theory as one of the most compelling theories bridging individual behaviour and social structure. Roles, which in part dictated by social structure and in part by social interactions, guide the behaviour of the individual. The individual in turn influences the

norms, expectations and behaviours associated with roles. The understanding is reciprocal. Thus, since the environment and occupation of the Niger Delta had been affected by the activities of oil companies in the region, the corresponding action will be to change their behaviour and belief system.

Impact of Oil Companies on the Niger Delta Area

The arrival of the oil companies in the Niger Delta had economic, educational, environmental and social impact on the region.

Economic Impact

The oil companies built their companies and employed their staff and paid them better than other workers in different sectors of the economy (Mathias 2005). In the 1970s, it was mandatory that any company that employed a certain number of staff will as well build estate for them (Mabogunje, 1978). Thus, most of these companies had quarters for their staff. They tried as much as possible to keep their staff comfortable by giving them welfare packages (SPDC Annual Review, 1999). The presence of these oil companies also attracted subsidiary economic activities: like the hotel business which provided accommodation for the expatriates and a place of relaxation for staff, automobile mechanics to take care of their cars and other services needed by them (Mathias, 2007).

Educational Impact

There was a rapid increase in the number of private schools in the Niger-Delta. A look at the number of private schools by 1979 shows over 200 percent increase in western and southern Nigeria (Philip, 1980).

Table I: Private School in Nigeria up to 1979

Period	North	West	East	South	Midwest	Total
Up to 1959	2	9	9	7	5	25
1960-1969	0	24	8	28	15	77
1970-1979	5	87	28	93	35	248
TOTAL	7	120	47	128	55	350

Source: The Nigeria Schools Directory, 1980.

The motives of the owners of these private institutions are varied. Some were imbued with nationalistic ideology; others were fired by their interest in what appeared to them to be a paying business. Thus, the Niger Delta region has private schools of different categories, scattered here and there.

On the other hand, the need for government employment had led to everyone desiring to be in school. This has two different effects on the educational system. People want to enter the university by all means, hence some will engage in all forms of cheating in order to gain admission. They also continue in the process to make sure they come out with a degree after four or five years (Mathias, 2005).

In another vein, oil company workers who have gained admission into the university live in affluence even on campus. A careful observation of the universities in the Niger Delta reveals that more cars are packed on campuses in the evening by students who come for lectures than in other universities outside the Niger Delta. The number of cars for school runs causes serious hold-up and traffic jam on daily basis. Most of the time students and pupils get to their schools as late as 6:00pm or even later. Thus, education in most urban centers in the Niger Delta has been bastardized and the meaning reduced.

Environmental Impact

The population weight of Port-Harcourt has resulted in excessive generation of waste. Adah (2003) reported that the waste situation in Port Harcourt is now a crisis matter. He added that waste generation is so high that if nothing is done, Port Harcourt will get to a state of one man one refuse dump. This same situation can be said for all the urban centers in the Niger Delta. The entire environment is being polluted by the various activities of the subsidiary businesses like mechanic workshops, hairdressing saloons, restaurants and hotels, hospitals and other health facilities. The impact of the above can not be over emphasized. Another area of concern is the green house effect. The green house effect is believed to be caused by methane and carbon dioxide gases which blanket the earth's atmosphere rather like the glass walls and roof of a green house. The effect is that heat is not readily lost from the earth and everything gets warmer and the average temperature of the earth gradually increases (ENVE 1994). Experts have also noted that a couple of increase in temperature results in expansion of desert areas which disrupt plant and animal life in the tropical regions. It is also postulated that an increase in the earth temperature will cause the level of the seas to rise as well as increase the likelihood of flooding. In the same vein shell Petroleum Development Companies, Eastern Division Annual Report (1995) stated that likely contribution to global warming in the Eastern Division is natural gas flaring which releases carbon dioxide and other by-products. Another contributor to global warming, according to the report, is the methane which is being released during venting of gas. Ironically, methane contributes much to the green house effect than carbon dioxide. As a result of the above situation, skin diseases and other heat exhaustion occur (Mathias, 2007).

Social Impact

Of recent, there is a great gap between the rich and the poor in the Niger-Delta Region. The salaries of the oil company workers are usually higher than that of the average government worker. Market survey by Nwadiaro (2003) reveals that the prices of commodities in the urban centers in the Niger Delta Region are far much higher than that in other cities in Nigeria. This also affects the cost of accommodation. Crime against property and person: like stealing, willful damage, arson, armed robbery, murder, rape and car snatching are common in the Niger-Delta region. This is because most of the migrants are unemployed hence engage in criminal activities to earn a living (Mathias, 2007). This paper is of the view that unemployment is not the only reason for such anti-social activities. It could also be argued that most of the people who migrate to the cities have a purpose and that is to make enough money like oil company workers. Hence, when they do not get jobs that can fetch such desired amount of money, they resolve to anti social activities such as armed robbery and non violent crime like prostitution. These activities disturb the peace of the cities.

Impact on Available Infrastructure Most infrastructures in the oil bearing communities are over used. This is because the number of people using them at a particular time is more than what they were designed for. This situation is evident in our roads. As a result of this, òhold-upö and ògo-slowö are common features in almost all the major roads in the urban centers in the Niger Delta (Nwadiaro, 1999). Electricity is another infrastructure that has been highly over stretched. The Power Holding Company of Nigeria (PHCN) takes light as often to enable them adjust the flow of current (Mathias 2005). The hospitals are over crowded. The out of stock -OSö syndrome is a common occurrence in the hospital. In some hospitals, bed spaces are being shared by two patients (Nwadiaro, 1999). Portable water is another basic problem in the Niger-Delta Region. Like the proverbial saying òwater here, water there, but not a drop to drinkö. The region has large water bodies. But they have all been polluted either by oil spillage, blocked with refuse or turned into public toilets. As earlier stated most facilities in the urban centers in the Niger-Delta are being over used thus, most people use the water bodies as their toilet. A good example is the present state of the *Nta Wogba Creek* in Port Harcourt, Rivers State. The beauty of the creek has been destroyed due to dumping of refuse and feases. The Government, Non-governmental Organization (NGO), Oil Companies and even individuals have on one hand provided boreholes and tap water but these are not yet enough. Very often these taps are crowded and people are seen fighting at the taps just to get water for domestic use.

Area of Study

Gbaran oral tradition shows that the founder of the kingdom Gbaranowei, the eldest son of Oporoza came from Ad (Benin). He first settled in Oporoza, Gbarantu and finally at a town opposite Kaima. On one of his hunting trips he discovered Gbarantu Creek. The British later changed the name to Taylor Creek. There was so much fish in the Creek; so as a result, he decided to carry his family, hiring his brother Kumbowei and Kabuowei. But as he was on the trip he missed his route so he entered the creek through Oktiama. There he settled. He had eight sons whose names are Okotiamia, Ogolomaowei, Agbiaowei, Okolobiri, Okoroama, Ibiaya, Obinegha and Nedugo. These eight sons each formed a town, namely; Agbia, Nedugo, Ogoloma, Oketiamia, Okolobiri, Obynagha, Koroma and Polaku. Later, Asaingbene broke out of Obynagha and formed a community. Also Ayama broke out of Okotiamia and founded a community. Okotiamia is the traditional headquarters of the clan while Okobiri is the political headquarter of the clan. The people of Gbaran clan engage in palm kernel and oil production which has boosted the economic, social and cultural life of the people of the clan. The advent of colonial rule impacted the leadership of the clan greatly. At first, leadership rotated in the hands of the deity worshippers. The presence of colonial rule changed the leadership style to democratically elected clan head devoid of deity worship.

Culture The people of Gbaran kingdom believe that the Supreme Being is the creator of the heaven and earth. The name of the creator is Wonyenai (meaning our mother). Traditionally, the people believed that spirits operate invisibly in the lives of some people. The people of the clan have festivals they celebrate. Chief among them is Uziye which is a celebration of first fruits (New yam). The significance is that the people give thanks to God for good harvest and pray to god for more in the next farming season. The festival is held once every year on the 15th of July and it last for seven days. The festival helps to socially integrate the people of the clan both at home and in Diaspora.

The people have great affinity for extended family system. The bond is very strong whether maternal or paternal. In terms of inheritance, it is the male that are recognized to inherit the family property. The clan is headed by the Ibanowe of the clan. Others are the paramount rulers of various communities, woman leaders, community development committee, youth leaders etc. All these bodies make sure that there is peace and harmony in the clan. The leaders are democratically elected at all levels and democratic processes are applied in exercising power and authority.

The traditions of the people had been carried down from generation to generation. The religious institutions of the people are traditional religion and Christian religion. Before the advent of western medicine, the sick were taken care of by local traditional healers and bone setters. On the other hand, if the sickness is believed to be caused by the spirits, the people consulted Sooth Sayers, diviners and healer (Radut, 2009).

The Gbaran Ubie Project

The Gbaran Ubie Integrated Oil and Gas Development Project (IOGP) is initiated by Shell to supply natural gas to the Nigeria liquefied Natural Gas (NLNG). This is an Engineering Procurement and Construction (EPC) contract that was supposed to be completed by 2008.

The major contract activities from the inception of the project till date include Survey activities, camp construction and Right of way preparation. All these activities destabilized the natural setting of the host communities. But a Hazard and Effects Management Plan (HEMP) work shop for the overall construction activities completed and construction Health, Safety and Environment (HSE) cases document was released. Thus, field survey activity was successfully carried out by Saipem through appointment of a subcontractor. The activities commenced from May 2006 and ended December 2006 (HSE News-letter, 2007).

The major challenge encountered by the project is community disturbance. This problem is multifaceted. This is because the project affected the livelihood of the host communities. The project was able to handle the challenges in the following ways:

Environment The Gbaran Ubie project crew made efforts to ensure a serene environment is achieved throughout the project phase. In order to achieve this, Saipem Construction Nigeria Limited (SCNL) installed a sewage treatment plant estimated to handle over 300, 000 liters of sewage waste. It is projected to serve the need of 700 people with an estimated sewage generation rate of 135 liter/day/capita. The sewage treatment plant is equipped with two pumps, with only one working at any particular time. In the event of failure of any pump, the second pump will function as a back-up. These plans and procedures are in line with Saipem and Shell Petroleum Development Company (SPDC) norms and standards SNCL ensures that efficient/ residue discharge from the treatment plant complies with Federal Ministry of Environment/ Department of Petroleum Resource (FMENV/DPR) directives. After the installation, a sub-contractor was engaged to manage it. This contractor is an indigenous contractor who was mandated to employ 100% of its non skilled staff from the host communities. Another indigenous sub-contractor was engaged to carry out a compliance monitoring around the Gbaran Ubie project location and camp site to monitor the environmental performance, with the same mandate on employment (HSE News letter, 2007).

Social Infrastructure

The project embarked on massive construction of infrastructural communities. Among them was a standard six-classroom block to accommodate 180 pupils in Emelego. And for the Girls secondary school in Emelego, a set of four self-contained standard corporers lodge was built to ensure comfortable accommodation for the Youth Corpers posted to the school and to help boost the meeting halls, conceived to boost the financial and social status of Emirikpoko people. In Akani community, a large town hall which consists of offices and meeting/conference rooms was conceived to provide a comfortable meeting place for the Akani people and also to empower the community economically. Income from the hiring of the venue for weddings and other social activities will be of benefits to the community. Water project was rehabilitated in Obedum community. The project involved the renovation and distribution of fetching points to every parts of the community. There were the Adada, Okordia / Zarama electrification project to mention but a few. The project manager highlighted that half of the pressure vessels used in the projects were owned by Nigerians with many coming from the host communities (GUIOGP, 2009).

There was also a massive construction of roads in order to link the communities. These links serve to boost socio-economic activities in the area. Farm produce from the area now easily reach the urban centers (GUIOGP, 2010).

According to Toluama Amangala who represented the Obunagha community in the Gbaran Ekpetiama GMoU drafting committee, the Gbaran Ekpetiama GMoU was his community's first experience of what a GMoU is all about. On the impact of the project to his community, Tolu said that no family in Obunabgan community can say that they have not benefited from the Gbaran Ubie project. He said "the project is a blessing". His reasons are stated below:

- We now have a back up electricity from the central processing facility (CPF).
- We are expecting an integrated water scheme which will be centered at Obunagha.
- We have been provided Obunagha CPF, road that enables us link to the Ekpitaima axis.
- We have internal roads in Obunagha built as a result of the Gbaran Ubie Project.
- SPDC has also trained our people to become scar folders and welders.
- The project has also brought some Obunagha community indigenes in Diaspora back home.

Health centers were constructed in all the communities (GUIOGP, 2007).

Human Capital Development The Gbaran Ubie project spans forty-six (46) communities in Bayelsa state. These communities are grouped into four clusters, Gbaran/Ekpetiama, Epie/Atissa, Zarama and Kolo Creek. Fund was allocated to be used over four years for community identified and ratified infrastructure project, human capital development, community health centers and economic empowerment programmes. The communities appointed representatives as project advisory committees who worked with SPDC appointed development agencies to encourage sustainability and ownership among the stake holders (GUIOGP, 2007). The human capital development activities rotate across the four clusters. The project management had series of meetings with clan head on ways of improving the management of community issues for smooth execution of project. Scholarship examinations were conducted for undergraduates from the host communities. In Gbaran/ Ekpetiama cluster 79 undergraduates who were successful were given scholarship to cover tuition fee for two

academic years. A second phase of the award was planned for students studying engineering and medicine (GUIOGP, 2008). A special focus was on the issue of women Empowerment. Women were generally empowered as a result of the Gbaran Ubie Project. The project contributed substantially to economic development in the Niger Delta and created jobs for local communities and Nigerian companies. All piping fabrication for the project was executed in Nigeria. Over 150 Nigerian companies provided services ranging from pipeline design and protective coating to dredging works, construction of temporary accommodation and bridges. The project is expected to create employment for almost 6,000 people-including contractors and service providers. About 90% of the workers are Nigerians. When the gas processing facility begins full-time operation it will create between 300-500 permanent jobs, employing several people from the host communities (GUIOGP, 2009). All scar folding activities in the site are handled by scar folders chosen from the host communities. In its effort to empower women, the project has executed economic empowerment projects to the tune of N60m in 14 communities, while 13 other projects worth N40m are on-going in 13 communities. The projects include Micro credits schemes at Ogbia, Obunagha, Ogboloma, Polaku, Asai-Igbene, Ayama, Tombia, Akaibiri, Bumoudi, Bumoundi-ibene, Ikiri and Okotiana communities all in Gbaran/Ekpetiama cluster. Two other Micro credit schemes are located at Epie-Zamara and Nyambiri-Zamara in Zamara/ Okordia cluster. Of the on-going 13 projects, ten (10) are fish farms located at Okotiana, Polaku, Asia- Gbene, Ayama, Tombia, Agudama-Ekpetiama, Bumoudi, Bumoundi-Gbene and ikiibiri in Gbaran/Ekpetiama cluster and Epie-Zamara and Nyambiri- Zamara both in Zamara/ Okordia cluster. The other projects include a plantain processing mill at Agudama-Epie, one cassava processing mill at Agudama- Epetiama. There are plans to commence more fish farms and cassava processing mills in eleven (11) communities in the area in the near future.

Also, in 2005, the Bayelsa State Government and SPDC signed a contract for the training of 230 youths from Gbaran communities in various trades under the SPDC skill acquisition youth training programme. Training was divided into Work Force Training (WFT) and Youth Training and Enterprise Programme (YTEP) for 230 youths.

To meet the manpower requirements for the Gbaran Ubie project, and to develop local manpower in Bayelsa State, the first batch of 20 Bayelsa State youths were deployed to Saipem's training ground for training in welding and pipeline fitting in July 2005. The training lasted for 3 months. The second batch of 20 trainees from Bayelsa commenced training in welding and pipe fitting in March and concluded in May 2006. Three ladies were in the batch.

The third batch of 50 work force trainees was split into two trades, carpentry and block laying /masonry with 20 youths undergoing skills acquisition in vocational and Technical Training Enterprise Programme (YTEP). The 18 months training programme being facilitated by National Directorate of Employment, Asaba, and Delta State University, Abraka to ensure that the trainees take the Federal Ministry of Labour Trade Test II and III exams at the end of the training programme. This will certify the trainees as craftsmen.

Another human capital development project embarked upon by SHELL was the community land transport schemes where a total of fifteen coaster and Hiace buses were handed over to Gbaran-Ekpetiama cluster. They are part of SPDC's contribution towards the economic empowerment of the host communities. In order to support the land transport scheme, SPDC also conducted defensive driving courses and driver's safety training for the bus drivers and their mates (GUIOGP, 2008).

Conclusion

The Gbaran Ubie project is of key importance to SPDC and the nation. It sustains not only long-term gas export to NLNG but also provide gas to the Gbaran project currently under construction. In addition, the projects facilities will enable the elimination of flaring from nearby flow stations. Any disturbance in this project will result to great loss to SPDC and the nation at large, hence, the need to tackle the challenge of community disturbances in the project site.

This they were able to do by providing an alternative roles for the indigenes since their source of livelihood was negatively affected by the activities of oil companies.

The new roles occupied the indigenes. Education was also made very attractive as modern facilities were introduced into the existing schools and the environment made friendly and more conducive.

Recommendation

From the fore going, the studying therefore recommends that:

- The idea of changing roles in order to change behaviour should be adopted by all oil companies in the Niger Delta; this will help to reduce youth restiveness in the Niger delta.
- Militancy should be de-emphasized. A situation where militants are given ransom if they surrender their arms should be discarded.
- All oil companies in the Niger Delta should be mandated to plan beyond oil exploration and production in Niger Delta and train personnel on other technologies such as cleaning water ways and reclaiming vegetations.

References

Adah, O. (2003) 21st Century Waste Management Technology in *Earth Watch Magazine* February Edition. Conservation and Development Report for the Niger Delta for the year 2004.

ENVE (1994) Working Together for the Protection of the Environment; A Publication of SPDC Nigeria: Limited. May 1994.

GUIOGP Social Performance Update Issue 1 September, 2007.

GUIOGP Social Performance Highlight Issue 2 Quarter 3 2008.

GUIOGP Social Performance Highlight Issue 4 August, 2008.

GUIOGP Social Performance Highlight Issue 10 Quarter 4 2009.

GUIOGP Social Performance Highlight Special Edition Quarter 2, 2010.

International Journal of Development and Management Review (INJODEMAR) Vol. 6 June, 2011
HSE Newsletter Quarter 2 Edition Volume 5 July 2007.

Ikelegbe, P.Z. (2006) *Socio-economic Problem in the Niger Delta*, Port Harcourt: Ido Publishers.

Mabogunje, C. (1978) *Urbanization in Nigeria*. London: University of London Press

Mathias, B.A. (2005) The Social Impact of Oil Companies in Port Harcourt, River State. A paper presented at a Symposium in Honour of Professors Ikenna Nzimiro, Inya Abam Eteng and W. Ogionwo. Organized by the Department of Sociology, University of Port Harcourt on 17-18 Feb, 2005.

Mathias, B.A. (2007) Preventive Medicine in Nigeria. A Study of Port Harcourt and Owerri Cities. *Journal of Sociology* Vol. 3 no 1 Sept, 2007.

Mathias, B.A. (2007) Economic Crisis and Health Care Delivery System: A Study of Private Health Care Delivery in Port Harcourt *Journal of Technical and Science Education (JOTASE)* Vol. 16, Nos. 1& 2.

Nwadiaro, C. (1999) Oil Mineral Production and Environmental Impact. A paper presented at a workshop organized by OMPADEC

Nwadiaro, C. (2003) Environmental Impact Assessment of Oil Producing State. (Unpublished) seminar MSC paper presented to the Department of Sociology, University of Port Harcourt Rivers State.

Orubu, C.O. (2002) Compensation for Trampled Surface Rights in the Nigerian Petroleum Industries: Suggestions for a Sustainable Livelihood Approach. *The Nigerian Economic and Financial Review* vol. 6 No 1.

Osborn, W.S. (1927) *Oil in the Middle East*. New York: Harper and Flow.

Philip, O.O. (1980) *The Nigerian School Directory* Ed. Ibadan, University Press.

Radut, D. (2009) The Gbaran Kingdom www.NigerDelta/gbarankingdom.htm retrieved 10-12-2010.

SPDC Eastern Division Annual Report December 1995.

SPDC Annual Review 1999.