

Trends in **Applied Sciences** Research

ISSN 1819-3579



Managing Environmental Conflicts in the Oil Producing Areas of Nigeria

¹O.A. Falode, ²K. Ogedengbe and ¹T. Bickersteth ¹Department of Petroleum Engineering, University of Ibadan, Ibadan, Nigeria ²Department of Agricultural Engineering, University of Ibadan, Ibadan, Nigeria

Abstract: The economic dependence of Nigeria on its petroleum resources is very great considering the country's income profile. Unfortunately, the development and distribution of these resources in the Niger Delta area creates significant environmental, social and economic impacts which have attendant effects on the water and agricultural resources, employment, income, housing, environmental quality and quality of life in the oil producing communities. Consequently, many conflicts, majorly social have arisen in the oil producing areas resulting in avoidable violence, fatalities, litigation and costly work stoppages with the attendant loss of revenue accruable from oil production. These conflicts have been unable to be resolved through the long adopted models and paradigms of conflict management. Against this backdrop, this study is therefore designed as a response and contribution towards new ways to conflict management in Africa. The study focused on the examination of the sources of conflict generation and profers solutions to the lingering crisis of the Niger Delta by adopting the Alternative Dispute Resolution (ADR) techniques i.e., (Public Involvement and Environmental Mediation) used in the United States of America for conflict management during the siting process of hazardous waste facilities. In pursuit of this objective, the instrument of survey research has been explored. The aim is to evolve a possible outcome that offers a solution that is acceptable to all stakeholders, thereby transforming the conflict into a cooperative situation.

Key words: Environment, crude oil, impact, pollution, conflict, resolution

Introduction

Conflicts have been a recurring decimal in the Niger Delta. These conflicts have taken dangerous forms of ethnic and communal clashes leading to loss of lives and property. Military incursion into governance has increased the frequency and affected the pattern of these conflicts in the Niger Delta. At the same time, the military by its nature suppressed the outward manifestation of some of the conflicts. Consequently, on return to civilian rule in 1999, the frequency and intensity of conflicts increased. It has been estimated that in the first two years of return to constitutional rule about ten thousand lives were lost to different kinds of conflict and violence. Government at all levels have failed to develop institutionalised mechanism for conflict prevention and management. Instead, the Federal government and oil companies continue to initiate, provoke and oil the conflicts. Communities in the Niger Delta responded in many ways including fighting themselves (Itsekiri Vs Urhobo; Itsekiri Vs Ijaw; Ijaw Vs Ilaje; Ogonis Vs Adonis etc.). Another form of response was kidnap of oil workers for ransom. Undoubtedly, these responses are not sustainable and cannot bring development to the

communities (Olokesusi, 1987a). While EIA studies have been more or less mandatory in Nigeria's petroleum industry since the 1980's, most of such studies lacked formal Public Involvement (PI) and Environmental Mediation (EM). Consequently, the concerns and opinions of the local communities are poorly addressed in the EIA/SIA process. In light of the preceding positions, this study examines the forms, causes, consequences and the management or resolution strategies of ethnic conflicts in the Niger Delta and proposed a new method of conflict resolution through the means of oral interview and questionnaire administration.

Literature Review

Project siting and natural resources management issues have a long history of causing public or social conflict. Citizens and sometimes politicians oppose some projects in their communities. Such situations have been described by various acronyms such as NIMBY (Not In My Back Yard) and LULU (Locally Unwanted Land Uses) (Lynn, 1987; Peele and Ellis, 1987).

Siting decisions are influenced by political pressures of different kinds exerted by numerous different groups of stakeholders. The pressures exerted are obviously not proportional to the total benefits each group would attain from different social choice options (O'Hare *et al.*, 1983). Community-based environment dissent is a function of factors such as perceived threats to local economic interests, a high degree of social integration among affected people and prior experience of regional or ethnic deprivation leading to collective resistance (Rudig, 1986). These factors play very prominent roles in the Nigerian situation, especially with respect to the Ogoni ethnic group. The state in Africa possesses monstrous power of control because the society has little control. The relationship between state and society is often undemocratic and conflict prone (Abucar, 1995).

Sabatier and Masmanian (1979) and Burdge (1994) suggest that public agency capture by private interests is virtually inevitable. They see two possible ways for this to occur. The first is the situation in which the outcome of the industry-public agency relationship leads to either selective interpretation or concealment of information about impacts while the second is the likelihood of collusion between public agency regulators and their industry clientele, thus leading to subversion of the original intention of the regulation and regulators.

According to Walker (1989) and Novek (1995), governments have been placed in difficult and contradictory positions both as environmental regulators and as promoters of economic development. For example, since the Department of Petroleum Resources (DPR) is an arm of the Nigerian National Petroleum Corporation (NNPC), it is difficult to establish its neutrality and objective position in the conflict.

Compensation could reduce opposition to siting by changing peoples motivation to oppose. This type of motivation is critical for local people that will be negatively affected by a project. Such effects include risks of accidents, pollution, reduction in property values, social disruption and increased local traffic (O'Hare *et al.*, 1983).

The US National Environmental Policy Act of 1969 (UNESPA) requires among other things public participation within the Federal environmental decision-making process. In 1978, the US Council of Environmental Quality requires that a scoping process (largely PI) be held prior to the preparation of a full scale Environmental Impact Statement (EIS).

Public involvement possesses the potential to benefit both the project and the community in many ways. For instance it is one way of educating the affected community as to the potential benefits and costs of the proposed action, alternative courses of action and their respective consequences (Burdge, 1983; Olokesusi, 1987a). Walker (1989) lends credence to the saying that "By taking part in

the affairs of his/her society, the citizen gains in knowledge and understanding, develop deeper sense of social responsibility and broaden his/her perspectives beyond the narrow confines of his/her private life". Olokesusi (1985), discusses the patronizing role of Nigerian based oil companies in project siting, in the guise of PI. He further submits that in analytical work that should precede the formulation of action plans (in Africa) and particularly for developmental interventions, far greater attention needs to be paid to the social organization of production and consumption, decision-making, resource allocation and access to resources and services (Olokesusi, 1987b). A study of selected public and private sector agencies concerning PI during impact assessment reveals overwhelming support for grassroots involvement (Olokesusi, 1995b).

Environmental Dispute Resolution (EDR) such as mediation is perceived as forward-looking and designed to anticipate future policy or practical conflicts. It is anticipatory consensus building as well as retrospective and reactive to existing disputes (Plater, 1992)). In the absence of mediation or other ADR techniques, many projects have failed. A typical example of a facility siting that failed is the Earthline/SCA's hazardous waste facility project in Wilsonville, Ilinois.

According to O'Hare *et al.* (1983), the episode was characterized by "lack of local control, legal and extra-legal delay tactics, misinformation and suspicion and a small localized and highly motivated public perceiving itself as being made much worse off by the facility operation".

Negotiation is crucial to mediation. Negotiation theory according to Zartman (1993) identifies ripe moments for compromise and agreement which is characterized first by a mutually painful stalemate and second, a recent or impending catastrophe.

ADR process is often seen to confer on citizens' greater power and influence in the decision-making process. Crowfoot and Julia (1990) says that "they may experience greater access to key decision makers and important information and they may be able to influence or control meeting agendas to their advantage". In the ADR process, there is no guarantee that the most powerful group will achieve their ends, while the less powerful will not (Susskind, 1978).

Environmental Crisis and Conflicts in the Niger Delta

The Obasanjo regime in 1978 promulgated the Land Use Act, partly to facilitate access for oil activities. This decree automatically confered on the Federal Government all rights of the people to livelihoods. Hence the compensatory rates for loss of communal lands have created many conflicts. Areas that felt the impact most are areas with minerals like crude oil. This is because companies gained access to the land owned and used by the community for food production. Majority of the people living in these areas are either farmers or fishermen. Due to the exploration of crude oil, there are oil spillages that destroy the ecosystem in the river thereby killing living organisms in the water body. Apart from this, flooding destroys the farmland produce. To effectively handle these problems, stakeholders must be identified. Who are the stakeholders? The government, Oil companies and members of the communities.

Roles and Shortcomings of all Stakeholders

The Government

Successive governments in Nigeria have been interested in the revenue derivable from crude oil but have not shown a commensurate interest in the environmental conservation and physical development of the areas from where the oil is derived. In the over forty years of oil exploration in Warri, the area has witnessed wanton environmental degradation, neglect and social dislocation.

Moreover, the outright dependence of the Nigerian economy on oil revenue does not pave way for the development of other sectors of the economy like agriculture.

The Oil Companies

The activities of the oil companies have wreaked havoc on the socio-economic environment of the host communities and have therefore found themselves as 'scape goats' in the imbroglio. They have also developed a "divide and rule" tactics in order to deal with the indigenes of the communities. On the positive note, some multinational companies finance developmental projects and provide jobs, scholarship schemes, schools and health care for their host communities.

The Community

The desire of host communities to stem the tide of renewed hostilities and the agitation for the total control of the revenue accruing from crude oil has reached a high crescendo.

Legal Framework

There is a weak legal framework for regulating practices in the oil and gas sector in Nigeria. This compounds the existing liabilities and the handicap to a sustainable development. The effective implementation of environmental laws and regulations in the oil producing areas is largely distorted by social and economic factors. Legislation on environmental issues relating to the oil sector in Nigeria is handled by the Department of Petroleum Resources (DPR) on behalf of FEPA.

Crisis and Conflicts Management Methods

The Alternative Dispute Resolution (ADR) Technique

Litigation used to be the predominant approach to dispute resolution but this expensive and time-consuming technique has been overshadowed by ADR techniques. The fundamental difference between classic or traditional PI and ADR is that in the former, actual involvement by the public is limited. It is public input to decision making which sometimes could be conflicting inputs. ADR on the other hand embraces PI such that "a citizen groups role in processing multiple inputs and in decision making is much more direct. ADR is meant to manage conflict. Issues that a citizen group raises are acted upon (or purposefully not acted upon) with the citizen group participating. Data are acquired and analyzed and trade off are made with direct participation of the citizen group. Alternatives are developed and evaluated collaboratively" (Crowfoot and Julia, 1990). ADR techniques are diverse and examples include arbitration, conciliation ombudsman, public policy dialogue and negotiation, facilitation and mediation.

Public Involvement (PI)

PI can be defined as an active process by which beneficiary/client groups influence the direction and execution of a development project with a view to enhancing their well-being. Some of the uses of PI are:

- It functions as a means of educating the impacted community as to the potential benefits and costs of the proposed action, alternative courses of action and their respective consequences.
- It serves as a means for the community or larger society to provide input to a proposed project before a final decision is reached, i.e., the public becomes part of the planning and decision-making process.

- It functions as an on-going data gathering tool for social impact variables
- More representation on the basis of participatory democracy and equity is regarded as being superior to narrow or small representation.
- Public involvement is one of the means by which resolution of conflicts can be achieved.

Mediation

Mediation is one of the most effective ADR techniques. It has been defined as a "structured process in which the mediator assists the disputants to reach a negotiated settlement of their differences". It is a non-compulsory procedure in which an impartial, neutral party facilitates the design of solutions in dispute which are acceptable to all parties. Mediation is now widely used to negotiate and settle conflicts in project siting and EIA.

Crisis and Conflict Management Methods in Nigeria

In the Nigerian context, mediation is old as it has been one of the conditions of the traditional or customary justice system. Traditional mediators in Nigeria are respected community leaders (Chiefs inclusive), sometimes (but not always) operating within a council of elders in a public community setting.

Section 31 to 35 of the Federal Environmental Impact Assessment Decree No. 86 of 1992, affirms the critical role which mediation can play in resolving conflicts associated with development projects. Section 31 through 36 deals largely with the issue of mediation in the EIA process. Some contentious issues have been raised in the sections under reference. First, only the Governing Council of FEPA can approve the use of mediation, the mediator himself or herself and fix the terms of reference of the mediation. Second, section 33 (1) alludes to the fact that it is only the council "that can determine those parties who are directly affected by or have a direct interest in the project". The decision must be binding to all parties. Section 32 states that the council in consultation with FEPA appoint a mediator and fix the terms of reference of the mediation. Section 34 contains the expected role and outcome of mediation; So far mediation has not been adopted in the EIA process. But it is anticipated that sooner or later, mediation shall be used hence the need to examine its role and strategies for doing it. The outline of the Nigeria's Petroleum Industry EIA process Decree 86 of 1992 involves a project proponent submitting an EIA report together with an application to the Petroleum Inspectorate of the DPR for approval. The application, more often than not, is approved after scrutiny. The Environmental Affairs Unit of the DPR is charged with environmental monitoring in the oil producing areas and submits its findings to the supervising Minister.

${\it Crisis \ and \ Conflicts \ Management \ Methods \ in \ the \ United \ States \ of \ America}$

While mediation has been used to resolve social/environmental conflicts for more than two decades in the US, it was not until 1990 that Congress passed an Act towards that end of rule making. The origin of using ADR in rule making of Environmental Protection Agency (EPA) according to Platter (1992) dates back to 1981. A notice was published in the Federal register in 1983 by EPA showing its intention to encourage ADR. After experimental dispute resolutions involving the Nonconformance Penalties (NCP), the EPA enacted the first final rule in 1985. ADR became technically legal in 1985, but it was in 1990 that the 101st Congress passed the Administrative Dispute Resolution Act (PL 101-552). The Negotiated Rule Making Act (PL 101-648) was passed as an amendment to the adjudication section of the Administrative Procedure Act. The Administrative Procedure Act authorizes Federal regulatory agencies to incorporate ADR into rule making and permits Federal funds to be used to cover the expenses of private party participants (Plater, 1992).

Case Study: ECOFLO Hazardous Waste Plant in Greensboro

Selecting the ECOFLO Hazardous waste plant in Greensboro, North Carolina, United States for study, the successful siting of the plant is largely an outcome of a proactive public involvement process by all parties concerned. The Public Involvement worked in the ECOFLO siting due to a number of factors. A high level of community education and environmental awareness enhanced multiparty communication review of the plant's design and operation to include negotiated modifications. Public Involvement (PI) and Environmental Mediation were adopted in the US for conflict management during the siting of the hazards waste management facility.

The ECOFLO hazardous waste plant in Greensboro North Carolina is a 4,088 sq. metre facility built to treat waste products by neutralization and centrifugation (with dioxins, PCBs, cyanides excluded from treatment). Exhaustive PI techniques were used in the decision to site the plant. Thus it is an example of a siting process that was facilitated by public education and active involvement. The PI process engaged the attention of citizen groups, individuals, country and state agencies apart from the project proponent. Information was shared with local citizens and government. Toxic materials were exempted from the plant by the owners. The public, press, state and local officials were taken on plant tours and public meetings were called by the proponent to educate the public before the state's public hearing began. To modify the local community, ECOFLO agreed to put some fire preventive measures in place and made alterations in transportation routes. Finally, permits were issued for development and operation.

Results and Discussion

An oral interview was conducted in Ogba, Egberna L.G.A. of Rivers State. Sixty respondents were interviewed. The respondents were interviewed based on four groups of 15 respondents each. The groups are Oil company workers, Indigenes of the community, Government officials and NGOs.

Based on the interview, the major causes of environmental conflicts and crisis in the area were given as follows:

- Environmental pollution and degradation
- Inadequate community level involvement
- Compensation regime
- Under development and neglect of the area

Preliminary Report on each group

The letters (a), (b), (c), (d) and (e) depict the major causes as follows:

- "a" represents environmental pollution and degradation
- "b" represents compensation regime
- "c" represents inadequate community level involvement
- "d" represents under development and neglect of the area
- "e" represents other causes.

From Table 1, out of a total of 15 respondents, 5 respondents gave inadequate community level involvement as the major cause, 4 gave environmental pollution and degradation, 3 gave underdevelopment and neglect of the area, 2 gave compensation regime while one person gave other causes as the major cause of conflict and crisis.

Table 1: Causes of crisis an Causes	a	ь	c	d	e	Total
No. of respondents	4	2	5	3	1	15
<u> </u>						
Table 2: Causes of crisis an	d conflicts:- Oil v	vorkers' view				
Causes	a	b	С	d	e	Total
No. of respondents	2	5	4	3	1	15
Table 3: Causes of crisis an	d conflicts: Gover	nment official'	s view			
Causes	a	b	с	d	e	Total
No. of respondents	3	4	5	2	1	15
Table 4: Causes of crisis an	d conflicts: Indige	enes; view				
Causes	a	b	с	d	e	Total
No. of respondents	3	4	4	3	1	15
		-				
Table 5: Final report						
Causes	a	b	С	d	e	Total
No. of respondents	12	15	18	11	4	60

From Table 2, it can be seen that majority of the oil workers gave the compensation regime as the major cause of conflicts and crisis followed by inadequate community level involvement.

From Table 3, can be deduced that most of the government officials interviewed gave inadequate community level involvement as the major cause of conflicts.

Here, four people gave the major cause of the conflicts to be the compensation regime while the same number of people gave inadequate community level involvement as the major cause (Table 4).

Final Report on the Causes of Conflicts and Crisis

On a final note, a total at 18 respondents gave inadequate community level involvement as a major cause. Inadequate community level involvement in the siting process of projects brought about alienation between the indigenous population and the state/oil companies coupled with distrust and suspicion (Table 5).

A total of 15 respondents gave the compensation regime as the major cause. Many respondents opined that government approved rents and compensation rates for crops and land use were grossly inadequate. The indigenes expect that the net benefits of petroleum resources development should be greater than the costs.

A total of 12 respondents gave environmental pollution and degradation as the major cause. This is of a major concern to environmentalists in general and the local communities due to the large scale pollution and degradation of vegetation and rivers which affects negatively the socio-economic lives of the people resulting in loss of jobs, food shortages and poverty.

Eleven respondents gave under development and neglect at the area as the major cause. A better part of the area is under developed, lacking good roads, potable water and basic infrastructural facilities. Only 4 respondents gave other causes such as involuntary displacement and relocation of people, poor environmental management and administration, etc as the major cause of conflicts and crisis in the area (Table 5).

Proffered Conflict Resolution and Crisis Management Methods

Public participation and mediation are not alien to Nigeria. Empirical evidence has clearly shown that a thorough understanding of local knowledge systems institutions and social organizations is a

prerequisite for supporting existing sustainable practices and for enhancing social and technological change. Negotiation and mediation have been integral parts of the traditional African decision making process. Traditionally, the elders take special roles such as managing public affairs; keeping the peace serving as judges and looking after community welfare (Mazrui, 1986).

Integration of Public Involvement and Mediation with the Nigerian EIA process

PI should start right from the project conceptualization phase and not after the feasibility report and draft EIAR are ready. Public hearing is important in PI and mediation.

The following questions should be asked when FEPA, DPR and project proponents shall be devising their local 'level' PI.

- Who are the people potentially affected by the project and what broad social groups and authority structures are present?
- Who are the local community leaders and influential groups?
- How effective are the environmental and socio-cultural organization including other NGOs involved with the community?
- What is the level of community awareness of the proposed project?
- What roles do political parties, local clients, religious and cultural organizations play?
- How do government agencies communicate with the local community?
- How does the proponent intend to communicate effectively with the local community and the general public?
- How effectively will the traditional (e.g., village square meeting), print and electronic media inform the public about the project?

The proponents of the NLNG and Mobil NLG benefited from the limited PI which helped to improve the qualities of the EIARs.

Figure 1 shows the proposed channels of communication of interaction among the various public and private sector agencies groups, affected individuals/interest groups, proponent and the general public in the EIA process. This blend of top-to-bottom approach is meant to empower local leaders and individuals with the view to influencing positive project planning and implementation.

The relevant State Environmental Protection Agency (SPEC) is expected to be much more active in the EIA process than hitherto so also are agencies such as the Environmental committee at the local levels and the Town Planning Authorities within the jurisdiction to which any project is being proposed. The latter agency will always have to approve the development permit application for all projects, irrespective of their being subject to EIA process.

Another way of entrenching PI is for FEPA, DPR, Local Environmental Committee and the proponent to always form a Community Project Advisory Committee (CPAC) which should include but not limited to the following:

- The proponent or representative
- Chairman of Local Environmental Committee (LEC) or representative
- Traditional head of community
- Representatives of FEPA, environmental and socio-cultural organizations including NGOs.
- Representative of the Environmental Affairs Department (EAD) of the proposed National Petroleum Resources Commission (NPRC).



Fig. 1: Proposed channels of communications/international for the EAI/SIA process in Nigeria,s petroleum industry

Source: Modified after Olokesusi, Towards an International Framework for Environment Impact Assessment Nigeria, Individual Research Report No. 6, NISER, Ibadan, Nigeria

- Chairman of the SPEC or representative
- · Representative of highest educational institution in or around the community and
- Chief executive officer of the Area Town Planning Authority.

The CPAC should provide input into project formation, design and planning, execution and monitoring. It should also arbitrate and mediate between individuals and groups during conflicts among other functions.

In rural settlements where petroleum resources exist, traditional rules are still greatly respected. Therefore, the active involvement of the traditional rulers should be encouraged by involving them in the mobilization of subjects, to oversee resettlement of displaced persons and acting as watchdogs over the project personnel. They should also be involved in arbitration and mediation.

Public involvement could be achieved by a combination of some of the following techniques:

- Questionnaire surveys
- · Oral interviews and focus group discussions
- Village square and/or town meetings
- Use of visual aids when dealing with technical competent audience
- Distribution of information kits and display centers
- Mass media reports
- Tours of existing projects with community members
- · Open letter to committee
- Conferences and workshops
- Screening and scoping exercise
- Public review and draft EIARs.

Mediation Strategies

Effective and successful mediation efforts require certain conditions such as:

- Each stakeholder group should regard others in the dispute as coequals.
- Each representative of the stakeholders should have sufficient clout and power to exercise some sanctions over the potential of co-negotiators to take unilateral action.
- Representatives of stakeholders should have sufficient clout and power to commit themselves
 and their constituences to the decisions taken and the implementation of any agreement endorsed.
- Parties to the dispute must exhibit some sense of urgency to resolve the dispute or get the proposal approved.

The Mediator

The mediator facilitates the process by improving communications, serving as interpreter, scheduling and arranging meetings, maintaining cross communication between parties and establishing a negotiation relationship. The mediator must maintain confidentiality of the proceedings until a final agreement is reached in the dispute. The provision in the EIA Decree that only FEPAs Governing council can appoint a mediator is questionable. There is need to give room to other interested parties to play this role if when there is some doubt about the position of one agency. In conflict situations, suspicion thrives irrespective of the true interests and positions of stakeholders. Any of these persons/agencies should be empowered to authorise another body or individual to convene a mediation meeting. It also means that they can authorise or appoint an acceptable mediator to a conflict. The costs of mediation shall be totally or partly borne by FEPA and the NPRC. Major disputants, state and local governments could contribute funds and other resources. It is the responsibility of FEPA to facilitate the implementation of all agreements reached. Unilateral changes by any of the parties should be disallowed by FEPA. All parties should be involved in the mediation process and the mediator must be honest, independent and reliable. Once a mediator has been appointed he would make contacts with the stakeholders to arrange time for meetings among other things.

The following people/agencies other than FEPA's Governing Council should have the powers to convene mediation meetings:

- The President and Vice-President of the Federal Republic of Nigeria
- The Senate and Lower house
- State Governments
- State house of assembly
- Former heads of states and governments
- Eminent persons of great repute
- Traditional rulers
- National Petroleum Resources Commission (NPRC)
- Chair persons of community development associations
- Retired judges and justices of peace and
- Leaders of recognized environmental and socio-cultural groups

The eventual conveners have been expanded because of some perceived political undertones in the complaints by oil producing communities. It is anticipated that most of the time, FEPA Governing Council will appoint the mediator but the peculiarity of Nigeria's polity must be recognized and planned for, as epitomized by the Ogoni issue.

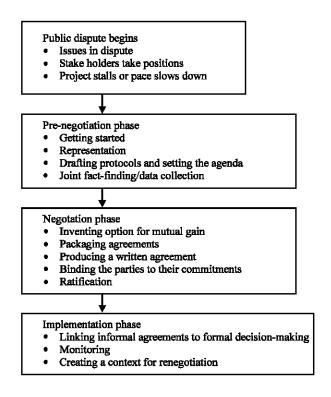


Fig. 2: Consensus-building process for dispute resolution

Source: Modified after Susskind, Lawrence and Jeffrey Cruikshank. 1987. Breaking the Impasse: Consensual Approaches to Resolving Public Disputes. New York, NY: Basic Books

The suggested conflict resolution process by mediation is depicted in Fig. 2. Each party to a dispute to be resolved through mediation must ask the following questions:

- Are all parties who have stakes in the outcome or the ability to influence implementation involved?
- Have all parties reached general agreement on the scope of the issues to be addressed?
- Are the negotiators for each party able to speak for their constituency? Is there reason to believe
 that if the negotiators reach an agreement, that agreement will be honoured by the groups they
 represent?
- Has there been a public commitment by the immediate parties
- Has a realistic deadline been set for the negotiations?
- Are there responsible assurances that affected government agencies able to implement an agreement if it is reached?
- Does the mediator operate from a base which is independent of the ultimate decision makers involved in this conflict?
- Do you trust the mediator to carry messages when appropriate and to honour confidential remarks?

Conclusions

Based on the result of the oral interview conducted, it was deduced that inadequate community level involvement is the major cause of the conflicts and crisis in the area.

In this light, the oil industry being a major contributor to the Nigerian economy; contributing significantly to scare foreign exchange earnings, employment and inter-industrial linkages, the existence of unsafe and unhealthy conditions would therefore constitute a serious impediment to the future growth of the industry. It is therefore important that the potentially negative, social, economic and biophysical impacts be assessed comprehensively and with public participation.

The absence of a well structured and participatory impact assessment process in the industry has been a major source of conflicts. Some conflicts could have been pre-empted had public involvement been used. Consequently, more attention needs to be paid to greater public involvement and alternative dispute resolution techniques. These hold greater promise for development planning than violence and litigation. PI can be used to resolve social conflicts, especially, if it incorporated information sharing, education and appropriate communication elements. This is typified by the ECOFLO case study.

Mediation is an integral part of public involvement and can be used to further reduce tension and resolve conflicts. Since social conflicts are pre-requisites for social change such as Nigeria is witnessing, there is need for better management of the social process. The EIA process integrated with public involvement, mediation and adequate compensation and mitigation measures is a promising management tool, which the industry should take advantage of.

Recommendation

The Federal Government in consultation with FEPA, The National Petroleum Resources Commission, oil company executives and members of the oil producing areas should come up with the modus operandi for mediation in the petroleum industry. FEPA should establish a more assertive role in environmental mitigation in the industry. Also, the appropriate legal and institutional framework for managing these functions should be established as soon as possible.

Training programmes in alternative dispute resolution techniques should be mounted by FEPA, NPRC and the oil industry. Participants to the programmes should include local communities, oil company staff, NGOs, the general public and researchers. A greater use of traditional PI techniques such as village square meetings and local language news reports should be used.

The proposed National Petroleum Resources Commission should be independent from its parent ministry which also supervise the Nigerian Petroleum Corporation should make for greater accountability and efficiency. NPRC will have to commit greater resources to assisting proponents to conduct better EIA monitoring and enforcing its regulations plans and programmes as well as assist to do the same with FEPA regulations.

The major oil companies need to strengthen their Community Relations and Environmental Affairs Units and they should work towards greater openness and mutually beneficial public information gathering and sharing in partnership with the local communities. These companies should be more proactive, ingenious and persistent in encouraging and eliciting public involvement. Local communities in the oil producing areas also need to recognize the need for tranquility, peace cooperation and progress. This is not suggesting that they have no right to protest perceived injustice or polluted environment, rather, redress should be sought through non-violent means and through greater involvement in the EIA/SIA process. There is a need for these communities to realize and

appreciate the dilemma posed to the government and oil companies by work stoppages, lost production and export earnings. The critical role which appropriate compensation can play in the PI process needs to be appropriately recognized by the government and oil companies. It has proven quite useful in many successful sittings in the United States of America. It is recommended to both the Federal Government and the oil companies. Finally, peace and social stability must now be introduced as the fifth factor of production. The process of mediation in conflict management should be adapted to manage social change and environmental protection concerns in the Nigerian Niger Delta in order to achieve a lasting peace and stability in the region in the new millennium.

References

- Abucar, M.H., 1995. Mass politics, elections and african social structure: Botswana and other African countries. Intl. Sociol., 19: 5-22.
- Burdge, R.J., 1994. Community Guide to Social Impact Assessment: Middleton, Wisconsin: Social Ecology Press.
- Burdge, R.J., 1983. Community Needs Assessment and Techniques. In: Social Impact Assessment Methods. Kurt Finsterbush, L.G. Llewellyn and C.P. Wolf (Eds.). Beverly Hills, C.A: Sage Publication, pp: 191-213.
- Crowfoot, J.E. and Julia M.W., 1990. Environmental Disputes: Community Involvement in Conflict Resolution. Washington, DC., (Island Press).
- Lynn, F.M., 1987. Citizen involvement in hazardous waste sites: Two North Carolina success stories. Environ. Impact Assess. Rev., 7: 347-362.
- Novek, J., 1995. Environmental impact assessment and sustainable development: Case studies of environmental conflict. Soc. Natl. Resour., 8: 145-160.
- O'Hare, M. et al., 1983. Facility Siting and Public Opposition. New York: Van Nostrand Reinhold Co.
- Olokesusi, F., 1985. Promoting environmental quality in Nigeria through environmental impact assessment and review. J. Nigerian Inst. Town Planners, 4: 132-138.
- Olokesusi, F., 1987a. Managing Environment Conflict in Nigeria's Petroleum Industry: The Role and Strategies of Mediation. JOSCOMF Publisher, Ibadan, Nigeria.
- Olokesusi, F., 1987b. Towards integrating public participation with the rural development process. An African perspective. Paper presented at the International Conference on Communication, June 8-12, University of Maiduguri, Nigeria.
- Olokesusi, F., 1975. Towards an Institutional framework for environmental impact assessment in Nigeria. Individual Research Report, No. 6, NISER, Ibadan, Nigeria.
- Mazrui, A., 1986. The Africans London: BBC Publications
- Peele, E. and R. Ellis, 1987. Hazardous Waste management outlook: Are there ways out of the Not-in-my Backyard Impasse? Forum for Applied Research and Public Policy, 2: 68-88.
- Plater, Z.J.B., 1992. Environmental law and policy: A course book on nature law and society. West Publishing Co., St. Paul, Minnestona.
- Rudig, W., 1986. An International Comparison of Public Protest in the USA Britain, France and West Germany in Public Acceptance of New Technologies: An International Review (Eds.) Williams, R. and S. Mills, London: Coom Helm, pp: 364-417.
- Sabatier, P. and S. Masmanian, 1979. The conditions of effective society. A guide to accomplishing policy objectives. Policy Anal., 5: 481-504.

- Susskind, L.E., 1978. Resolving Environmental Disputes. Approaches to Intervention, Negotiation and Conflict Resolution. Cambridge, M.A. (Ed.). Environmental impact assessment project, Laboratory of Architecture and planning, MIT.
- Walker, K.S., 1989. The state in environmental management: The ecological dimension. Political Studies, 37: 25-38.
- Zartman, T.W., 1993. Lessons for Analysis and Peace In International Environmental Negotiation. Newbury Park, CA: Sage Publications, pp. 262-274.