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RESEARCH ARTICLE

REVIEW OF ENVIRONMENTAL IMPACT ASSESSMENT FOR PLANNING PROJECTS IN NIGERIA: A COMPARATIVE ANALYSIS WITH POLICY RECOMMENDATIONS

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ABSTRACT

The EIA process that is directed towards best practice for sustainable development is beneficial to both the society and the environment. The paper assesses the effectiveness of EIA practice in Nigeria by ascertaining whether the EIA practiced in Nigeria is in line with guidelines for best practice as provided by International Association of Impact Assessment (IAIA), with specific focus on public participation and EIA follow-up. A questionnaire survey was conducted with 49 respondents from different categories of EIA stakeholders. The respondents included Government officials, EIA consultants/experts, developers, Academics and NGO representatives. The results of the research reveal many weaknesses in the Nigerian EIA practice. 76% of respondents agreed that impact monitoring is ineffective while 70% were of the opinion that EIA awareness is low and that the public is not well informed or encouraged to participate in the EIA process. Incompetence of EIA practitioners, inadequate power of enforcement to the regulatory agencies and poor coordination between stakeholders were also identified as reasons for inadequacies of Nigerian EIA practices. The paper also makes recommendations on how to improve EIA practice in Nigeria. To make EIA more participative, the public must be enlightened and educated through intensive campaigns, they must be well informed about the interventions and their consequences. For impact monitoring to be effective, regulators should be empowered to enforce compliance and trained in impact monitoring techniques. The government, on the other hand, should provide adequate funds and logistics for project monitoring.

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INTRODUCTION

Nigeria is a developing economy with high population and rapid urbanisation. Ineffective management of natural resources over the years and unplanned development has led to socio – economic and environment problems. Prior to the enactment of Environmental Impact Assessment (EIA) legislation in 1992, most large scale projects such as construction of highways, industries, seaports, dams and irrigation were considered with emphasis on traditional technical and cost – benefit analysis (Olokesusi, 1998). The Federal Government showed commitment to environmental protection by making EIA compulsory for all large projects likely to have significant adverse effect on the environment and social impacts. Many national documents on environment, construction and agricultural policy recognised the use of EIA as a planning tool used to predict and evaluate the impacts of proposed projects in order to inform decision – making. Nigeria adopts three different independent EIA systems for nationally funded projects – the EIA Decree 86 (1992), the Town and Country Planning Decree 88 (1992) and the Petroleum Act (1969).

The difference between Nigerian systems and the more conventional EIA systems raises the question as to whether the Nigerian EIA practices are evolving toward best EIA practice (Ogunba, 2004). Significant prior studies on EIA in Nigeria have been in the areas of legal and institutional framework (Olokesusi, 1998 and Echefu and Akpofure 2002), the evolution of the Nigerian EIA systems, the appraisal of current practices and shortcomings (Ogunba, 2004), and community participation (Adomokai and Sheate, 2004). However, not much research has been undertaken on the review of EIA process in Nigeria in the light of common guidelines for best practice with particular focus on public participation and EIA follow-up. This paper seeks to fill this gap. The main objectives of the paper are to ascertain whether the EIA practiced in Nigeria is in accordance with international guidelines for best practice and to make recommendations for advancing and improving EIA practice in Nigeria. This paper begins by reviewing international guiding principles for EIA best practice.

Common guiding principles for EIA good practice

There are different views on what constitutes a good EIA practice. Some indicators of a good EIA practice include: post

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decision and implementation monitoring and audit provisions (Frost, 1997); provision of adequate powers of enforcement to regulating agencies (Kakonge and Imevbore, 1993); consideration of alternatives (Alo, 1999); use of qualified and experienced EIA practitioners (West et al. 1993, Skeham 1993, Alo 1999); and public input into decision making.

The IAIA also provides operating principles on how the basic principles above should be applied to the main steps and specific activities of the environmental impact assessment process; e.g., screening; scoping; identification of impacts; assessment of alternatives; preparation and review of EIS; decision making; and follow up (IAIA, 1999).



Source: <http://www.ezilon.com/maps/images/africa/political-map-of-Nigerian.gif>

Figure 1. Political Map of Nigeria

The question of whether EIA is achieving its objectives such as; an aid to decision making, an aid to the formulation of development actions, a vehicle for stakeholder consultation and participation and an instrument for sustainability has been a focus of many academic work (see for instance Glasson *et al.*, 2012, Zhang *et al.*, 2013). To realise the objectives of EIA, the IAIA (1999) provides basic principles for EIA practice that are intended to provide guidance consistent with the institutional and process arrangements that are in force in different countries. The IAIA principles are generally applicable and Bruch (2002) agreed that some guidelines are not necessarily country-specific but are universally applicable. According to IAIA (1999) the EIA process should: inform decision making; employ methodologies and techniques best suited to address the problems being investigated; be practical, relevant, credible, adaptive and cost effective; provide appropriate opportunities to inform and involve the interested and affected publics; and address public inputs and concerns explicitly in the documentation and decision making.

According to IAIA operating principles, the EIA process should also be applied: as early as possible in decision making; to all development proposals that may cause potentially significant effects to the environment; and in accordance with internationally agreed measures and activities.

Guideline principles for public participation best practice

Public participation is considered to be essential in environmental decision making (Vincent *et al.* 2012, Sheate 2012, O'Faircheallaigh 2010, Luyet *et al.*, 2012, Portman 2009, Bruch 2002, Diduck and Mitchell 2003, Nadeem and Fischer 2011, Canter 1997, Hartley and Wood, 2005). Li *et al.* (2012) and Sheate (2012) recognise public participation as a platform for proponents to be held accountable for their actions and ensure sustainability. In the same vein, Nadeem and Fisher (2011) stressed that public participation in EIA has succeeded in providing a more egalitarian environment. To realise these benefits, public participation must be effectively

carried out. Furia and Wallace – Jones (2000) identify four factors that contribute to effective public participation to be: the nature of the public involved; the amount of power the public is attributed in the EIA; when the public is involved; and the ability to manage conflicts. According to the IAIA (1999) guiding principles, public participation should be initiated early and maintained throughout the EIA process. Individuals, organised groups and people with diverse interest should be involved. The techniques and methods used should give the opportunity for the public to contribute to the EIA process. Conflicts should be anticipated and genuine efforts made for resolution instead of exacerbating it. The Aarhus Convention's principles for effective participation includes early participation, access to information and documentation, discussion with public and consideration of participation outcome in decision making (Hartley and Wood, 2005). Andre et al. (2006) likewise provide principles of best practice to ensure that the participation process is credible and maximises interest and commitment from the stakeholders. The principles include education of the public and effective communication, provision of feedback into the EIA process through public participation and genuine effort in conflict resolutions.

Guidelines principles for EIA follow-up best practice

EIA follow-up is defined as the monitoring, evaluation, management and communication of the environmental performance of a project (Morrison – Saunders and Art, 2004). Four elements are identified in the above definition, these are: monitoring of project impacts and compliance to terms and conditions for approval of the project; evaluation of predictions, standards and overall environmental performance of the project; management of monitoring and evaluation activities; and communication of the results of EIA to the stakeholders (Art et al. 2001). The benefits of EIA follow-up have long been recognised. Apart from improving project management, it makes for a better planning and improved EIA practice, from understanding baseline conditions to the framing of effective mitigating and enhancement measures (Glasson et al. 2012, Ahmmed and Nixon, 2006). The importance of EIA follow-up is summed by O'Faircheallaigh (2007, pg. 2) who argues that ineffective follow-up to EIA makes it *'difficult to monitor whether expected impacts materialise, to respond to unanticipated impacts, to take advantage of unexpected opportunities to enhance environmental outcomes and to learn from experience'*.

The IAIA developed guiding and operating principles for effective implementation of EIA follow-up. The principles according Morrison–Saunders et al. (2007) include: transparency and openness, commitment to follow-up (sustained over the entire life of the project), and timely, adaptive and action-oriented implementation.

MATERIALS AND METHODS

The research is qualitative in nature. An evaluation framework was developed based on: review of relevant literature and a survey questionnaire with EIA stakeholders in Nigeria. Data was collected in view of the central theme and objectives of the research. The result of the survey questionnaire was combined with literature reviewed to provide an evaluation of the EIA process in Nigeria. The research process is based on

Bloom's 1956 six levels within the cognitive domain, namely knowledge, comprehension, application, analysis, synthesis and evaluation (Pappas et al. 2013). The literature review mainly included scholarly articles and books on EIA process and procedure in Nigeria and public participation and follow-up in EIA process in Nigeria. The literature review provided in-depth understanding of the opinions and experiences of researchers, policy makers and the general public. A structured questionnaire survey with EIA stakeholders – government officials, EIA Consultants, representatives of NGOs, developers and Academics – was conducted. The stakeholders were contacted and asked to participate through e-mails, phone calls and face to face consultation. They were given full details of the focus of the research and assured of their anonymity. In all, 70 questionnaires were given out but only 49 stakeholders participated in the survey. Wide range of stakeholders with diverse backgrounds were sampled to minimise bias and to bring out different perspectives on the research questions. The respondents with adequate knowledge and practical experience of the current EIA practice in Nigeria were chosen in order to ensure that the findings from the survey are useful.

The structured questionnaire was designed to cover essential aspects of EIA practice: legislative and administrative provisions for EIA; process and procedure; experience of public participation and impact monitoring; and recommendations for future improvement. Close-ended and viewpoints questions were asked to draw out the stakeholder's opinions on issues widely recognized in EIA and their experience in the Nigerian context. The results of the questionnaire survey were analyzed and presented in tables and charts. Specifically, current EIA practice in Nigeria was reviewed based on guidelines for EIA best practice as provided by the International Association for Impact Assessment (IAIA).

FINDINGS AND DISCUSSION

The key to achieving the objectives of EIA, which is reducing the environmental effects of development projects, is applying the principles of good practice identified in the literature. EIA procedures are identified as key mechanisms of converting the principles and criteria of sustainable development into practical strategies and actions (Yusuf et al., 2007). However, there is apparent disregard to procedural guidelines in implementation of EIA in Nigeria. The EIA Act made it mandatory for EIA to be conducted for all projects likely to have significant effects on the environment. This is hardly the case in reality. Many stakeholders responded that EIA studies are carried out as a secondary consideration and sometimes, not at all. The proponents take advantage of the inadequate enforcement by the regulators to short-circuit the EIA process, by commencing with execution of projects without an approved EIA. When EIA is later carried out, it becomes a mere formality. The deficiencies of the regulatory agencies have led to adverse environmental and socio-economic impacts by projects which are developed and operated without undergoing an EIA. This confirms Morrison–Saunders and Retief (2012) observation that notwithstanding a strong and explicit sustainability mandate through policy and legislation, the effectiveness of EIA practice falls short of what is mandated especially in Africa.

Public participation from project inception to implementation

70% of the respondents believed that EIA awareness in Nigeria is low or very low and that the public is not well informed or given the opportunity to participate in EIA review. More than 40% of the stakeholders responded that public notices with information about projects were never published in national or state newspaper as opposed to the provisions of the procedural guidelines. When asked if the participants in public consultation meetings they have attended represented all categories of the stakeholders, 50% responded 'Yes' while the other 50% said 'No'. When asked whether public participation in the EIA process is transparent, only 44% responded in affirmative. Some stakeholders attributed the lack of transparency to corruption, carelessness and nonchalant attitude by the people involved. Infact, majority of the stakeholders responded that participants of the public consultation meetings were not given the opportunity to read the minutes of the meetings and more than half answered that the final EIA reports were not accessible to the public. On conflict resolution, 82% of the stakeholders agree that genuine attempts were made by proponents of EIA to resolve conflicts in projects they have associated with.

As noted in the literature, participation improves openness, transparency and accountability in the EIA process (Morrison-Saunders et al., 2007). The opinions of the public should be sought from project initiation to implementation and the effective way to do this is through public participation. Currently, public participation in EIA process is low in Nigeria. The participatory process is not as effective as it should be, partly because the members of the public are unaware or not informed about their right to influence decision-making in environmental developments. The low level of public participation is also as a result of poverty and low capacity of the general public. They are generally not educated on the potential adverse effects of such interventions. The people are more interested in meeting their immediate needs than worrying about future effects of environmental developments. Many stakeholders agree that the government has not done enough to encourage public involvement in the EIA process. The public do not really understand the opportunities available to them. Apart from this, there seems to be deliberate attempts to exclude interested members of the public from the decision-making process. Comparative review of the current participatory practice according to some guidelines for effective participation provided by the IAIA highlights flaws in provision of adequate information on planned interventions and their consequences, early initiation of public participation and transparency in the EIA process.

Impact Monitoring, implementation of mitigation measures and audit provisions

For EIA to be useful and not just pro-forma, the mitigating measures highlighted in the Environmental Impact Statement (EIS) must be implemented. To determine the extent to which this is done in Nigeria, stakeholders were asked how often the mitigating measures were implemented in projects they were involved in, 47% responded less often and not at all. One EIA

Consultant commented: "Some (projects) are even implemented before the final reports are ready".

76% of the stakeholders agreed that impact monitoring during project implementation is not effective. Some considered corruption, cost, lack of sincerity of purpose on behalf of the EIA proponents, low level of professionalism and lack of interest as part of the reason impact monitoring is not effective in Nigeria. Unsurprisingly, the remaining 24% of stakeholders who believe that impact monitoring is effective are mainly government officials. One can note an element of bias there. The stakeholders have different perspectives on how impact monitoring can be improved. Majority of stakeholders agree that use of qualified and well-trained personnel, provision of adequate funding, responsible regulators, clearly defined regulatory framework for project monitoring, participatory monitoring by the stakeholders and empowering the relevant agencies will help to improve impact monitoring during project implementation. To realise the full benefit of EIA, post-decision monitoring must be carried out to ensure that the required mitigation and enhancement measures are implemented. EIAs are approved on this premise. Effective implementation of EIA is unlikely if monitoring is weak and mitigation measures are poorly implemented. The responses from the stakeholders indicate that funds made available for project monitoring are inadequate. Shortage of funds has made it difficult for regulatory agencies to cope with many terms of references. Stakeholders from regulatory agencies call for allocation of enough funds to the EIA monitoring unit. Another participant from EIA consultancy firm adds that the necessary logistical support in terms of provision of project monitoring vehicles and incentives could improve the effectiveness of the monitoring process. This can be helped by making budgetary provision for monitoring in the overall cost of the projects.

Effectiveness of impact monitoring also depend largely on the regulatory enforcement. Failure to adhere to regulations is said to be one of the reasons environmental problems persist in Nigeria (FMEnv, 2011). Inadequate enforcement is partially due to lack of power of enforcement given to the regulatory agencies, forty-eight percent of the stakeholders agree. The regulatory agencies should be empowered to sanction infractions and non-compliance to terms and conditions of EIA approval. The EIA proponents and developers, who are usually other government ministries and multinational companies, pay no heed to the local authorities and are too powerful for the regulatory agencies to exercise authority for fear of loss of job or life. A stakeholder from a regulatory agency recommends use of government law enforcement officers (police) as physical support. Ten percent of the stakeholders respond that lack of qualified personnel is the reason for ineffective impact monitoring during project implementation. Some regulators are not trained on effective monitoring techniques; many are not even familiar with the EMP of projects they supervise.

"There seems to be corruption in the process which hinders the degree of effectiveness" (EIA Expert)

Many stakeholders share the same thoughts. A stakeholder recommends the use of responsible regulators who will not "cover up" for the developers when the terms of approval are not met. EIA experts on the other hand, often act as advocates

of the proponents and developers, since their services are paid for by them.

Recommendations and Conclusion

The Nigerian EIA practice falls short of principles of good practice such: implementation of the procedural requirement of EIA; public participation from project inception to implementation; and Implementation of mitigating measures, monitoring and audit provisions. Often, EIA in Nigeria is carried out as an afterthought and has no contribution to the decision making of planning projects. Unfortunately, some EIA studies are carried out after the project to be assessed has been completed to fulfil 'due process', when there are conflicts or agitations by the affected communities. This way, the EIA has no reflection on the decision making of the project. Where EIA is implemented, the public is rarely given the opportunity to participate and post decision monitoring (EIA follow-up) of projects' impacts and implementation of mitigation measures is non-existent.

Recommendations

In order to address the challenges and constraints of EIA implementation in Nigeria, the study recommends:

- Revision of the present EIA legislations to harmonise all regulatory agencies, clearly define responsibilities, empower the regulatory agencies and strengthen enforcement procedures. Provision should also be made for mechanisms to sanction and punish non-compliance to the terms and conditions of approval of EIA and general violations of environmental regulations in the EIA legislation.
- The government, proponents and the regulatory agencies should invest in capacity building, motivation of their staff through added incentives and provision of adequate logistics to help them carry out their duties effectively without hindrance or monetary inducements from unscrupulous developers.
- The process of accreditation of EIA consultants must be systematic and efficient to stop unqualified people from performing assessment. Code of ethics should be provided for EIA practitioners and renewal of license should be tied to performance in terms of implementation of mitigation measures.
- Proper communication and coordination between stakeholders to avoid confusion and encourage integration of all stakeholders' views and concerns in the EIA process.
- To improve public participation in the EIA process, the public should be enlightened through awareness campaign on EIA. They should also be informed and educated about their right to participate in the process, be encouraged to take part in the decision making that affects them. Creative ways should be devised to reach affected people in the rural areas.

Conclusion

A good practice EIA engender trust in the process and gives the stakeholders confidence that the environmental effects will be well managed. EIA should not be seen as only fulfilling a

commitment. The government representatives and politicians should be sincere in implementing the EIA process and not see it as a waste of time and resources. Developments should be placed in their environmental context. Provision of infrastructure and economic development should not be at the expense of the environment and the future generation.

Note

Eduak Eduok is an Environmental Monitoring Expert in Nigeria. The research on which this paper is based was undertaken at Imperial College London in 2013 as part of her MSc in Environmental Technology.

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