THE EFFECTIVENESS OF EIA PROCESS AND PROCEDURE IN SABAH: VIEWS OF ENVIRONMENTAL CONSULTANTS

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ABSTRAK

KEBERKESANAN PROSES DAN PROSEDUR EIA DI SABAH: PANDANGAN PERUNDING ALAM SEKITAR

Penilaian kesan kepada alam sekitar (EIA) adalah satu alat pengurusan alam sekitar yang telah diguna pakai oleh ramai pihak. Sejak EIA diperkenalkan, telah banyak kajian dijalankan untuk meneliti keberkesanannya. Objektif kajian ini adalah untuk meneliti keberkesanan proses dan prosedur EIA di Sabah melalui analisa pandangan perunding alam sekitar dan mengenalpasti langkah-langkah bagi memperbaiki sistem EIA berkenaan. Pandangan perunding alam sekitar diperolehi melalui borang soal selidik dan data yang diperolehi dianalisa menggunakan teknik statistik. Hasil kajian mendapati proses dan prosedur sedia ada adalah jelas dan mudah dilaksanakan, berupaya mengenalpasti langkah kawalan dan program pemantauan bagi mengurangkan kesan alam sekitar, dan berupaya memberikan maklumat yang baik kepada pihak berkuasa yang berkaitan bagi tujuan membuat keputusan. Hasil kajian ini juga mendapati halangan dan masalah terhadap sistem EIA sedia ada adalah kurangnya kesedaran pemaju projek tentang kebaikan dan kelebihan EIA, kerjasama dan koordinasi di antara jabatan-jabatan kerajaan dan kurangnya penglibatan orang awam.

ABSTRACT

THE EFFECTIVENESS OF EIA PROCESS AND PROCEDURE IN SABAH: VIEWS OF ENVIRONMENTAL CONSULTANTS

Environmental Impact Assessment (EIA) has become a widely used tool for environmental management. Since the introduction of EIA, there has been much interest to study its effectiveness. The objective of this study is to assess the effectiveness of the current EIA process and procedure in Sabah through exploring the views of environmental consultants and to consider future actions for improvement. The views of environmental consultants were examined using a questionnaire survey and data from the questionnaires was analysed using descriptive statistic techniques. The results of this research indicate that current EIA process and procedure are clear and easy to follow, able to identify appropriate mitigating measures and monitoring programmes in order to reduce the adverse impacts to the environment, and able to provide good information to the relevant approving authorities for decision making. This study also found that the main challenges or problems on the existing EIA system are the lack of awareness on the benefits of EIA by project proponent, cooperation and coordination among government departments and lack of public involvement.

ABBREVIATIONS

EIA	: Environmental Impact Assessment
EPD	: Environment Protection Department
DOE	: Department of Environment
SEA	: Strategic Environmental Assessment
TOR	: Terms of Reference

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CHAPTER 1

INTRODUCTION

1.1 Background

Environmental impact assessment (EIA) is one of the significant tools that have been developed in environmental management. EIA was basically stimulated by the introduction of the National Environmental Policy Act 1969 in the USA (Barrow, 1997). Since then the EIA systems have been established in many countries and become a powerful environmental safeguard in the project planning process (Therivel & Morris, 1995).

In Malaysia, the EIA system has been adopted and adapted much quicker than many developed countries. The Third Malaysia Plan of 1976 recognised the need for environmental impact assessment and Section 34A of the Environmental Quality (Amendment) Act 1984, provide the provision to enact legislation requiring assessment for all public or private projects likely to have major environmental effects (Barrow, 1997). The Environmental Quality (Prescribed Activities) (Environmental Impact Assessment) Order 1987 which was enacted under this Act, prescribed activities that require EIA report. This Order was enforced on the 1st of April 1988 in all the 13 states in Malaysia (Justin Sentian & Piakong Mohd. Tuah, 2001).

In Sabah, the passing of the Conservation of Environment Enactment 1996 and the Conservation of Environment (Prescribed Activities) Order 1999 further strengthened the EIA system. This Enactment and Order was subsequently replaced by the Environment Protection Enactment 2002 and Environment Protection (Prescribed Activities) (Environmental Impact Assessment) Order 2005 on the 3rd January 2006.

1.2 Research Objectives

The objectives of this study are to assess the effectiveness of the current EIA process and procedure in Sabah through exploring the views of environmental consultants and to consider future actions to improve the effectiveness of the existing EIA system.

Basically, the EIA process can be divided into two phases that is pre-decision and post-decision. This study will focus on the EIA process and procedure in the pre-decision phase implemented by the Environment Protection Department (EPD), Sabah. Post-decision phase or follow-up, such as monitoring and compliance of the environmental conditions are not covered in this study.

1.3 Justification and Significance of this Study

Many studies throughout the world have been carried out to determine the effectiveness of the EIA system. Through an international study conducted in the 1990s, Sadler (1996) highlighted many areas such as scoping, evaluation of impact

significance, review of EIA quality and monitoring and follow up need to be improved.

However, there has been no specific study carried out to assess the effectiveness of the current EIA process and procedure implemented in Sabah. Understanding the strengths and weaknesses of the EIA system is important to identify actions required to improve the effectiveness of the EIA system and subsequently to enhance the integration of environmental factors into development activities and exploitation of natural resources.

CHAPTER 2

LITERATURE REVIEW

2.1 Environmental Impact Assessment

There is no universal definition of Environmental Impact Assessment (EIA). IAIA (1999) defines EIA as a process of identifying, predicting, evaluating and mitigating the biophysical, social and other relevant effects of proposed projects and physical activities prior to major decisions and commitments being made.

In Malaysia, the general definition of EIA is a study to identify, predict, evaluate and communicate information about the impacts on the environment of a proposed project and to detail out the mitigating measures prior to project approval and implementation (DOE, 1994). It is further stated that an EIA report comprises a report or series of reports which provide a detailed assessment in quantitative terms wherever possible, and in qualitative terms of the likely environmental impacts of a development activity and the measures required to prevent, mitigate or abate any adverse environmental impacts or to protect the environment (EPD, 2005).

2.2 EIA Legal Requirement in Sabah

Since the enforcement of the Environmental Quality (Prescribed Activities) (Environmental Impact Assessment) Order 1987 on the 1st of April 1988, EIA is a mandatory requirement in Malaysia including Sabah for activities prescribed in the Order. The main aim of the EIA procedure in Malaysia is to assist environmental planning of new development projects or to the expansion of existing projects (Vun *et al.*, 2004).

In Sabah, the passing of the Conservation of Environment Enactment, 1996, which was enforced on the 1st August 1998, was an important step taken by the State Government of Sabah to strengthen the legal framework for the protection and enhancement of the environment. In 1st September 1999, the Conservation of Environment (Prescribed Activities) Order, 1999 was gazetted, making the Environmental Impact Assessment (EIA) a mandatory State requirement for activities prescribed in the Order. The overall objective of the Order is to regulate and mitigate activities associated with land development and the utilization of natural resources. This Enactment and Order was subsequently replaced by the Environment Protection Enactment 2002 and Environment Protection (Prescribed Activities) (Environmental Impact Assessment) Order 2005 on the 3rd January 2006.

The Environmental Protection Department (EPD) and the Federal Department of Environment (DOE) jointly share the responsibility for administering the EIA system in Sabah. The EPD is responsible for EIAs covered by the Environment Protection (Prescribed Activities) (Environmental Impact Assessment) Order 2005, while the

DOE is responsible for EIAs covered by the Environmental Quality (Prescribed Activities) (Environmental Impact Assessment) Order, 1987 excluding the Prescribed Activities listed in the Environment Protection (Prescribed Activities) (Environmental Impact Assessment) Order 2005.

Table 2.1 differentiated the categories of prescribed activities under the Environment Protection (Prescribed Activities) (Environmental Impact Assessment) Order 2005 and under the Environmental Quality (Prescribed Activities) (Environmental Impact Assessment) Order, 1987.

Table 2.1: Categories of prescribed activities under EPD and DOE

Environment Protection (Prescribed Activities) (Environmental Impact Assessment) Order 2005	**Environmental Quality (Prescribed Activities) (Environmental Impact Assessment) Order, 1987**
Agricultural development, Forestry, Development of housing, industry & commercial estates, Drainage & Irrigation, Land Reclamation, Fisheries and aquaculture, Mining, Power generation (Dams & Hydroelectric), Quarrying, Resorts and recreational development, Water supply	Industries (Chemical & Petrochemicals, Non-ferrous, Non-metallic, Iron & Steel, Shipyards, Pulp and Paper), Infrastructure (Constructions of Hospitals, Expressways & National highways, New townships), Construction of Ports, Petroleum, Power Generation and Transmission, Construction of Railways, Construction of mass rapid transport projects, Waste Treatment and Disposal (Toxic & hazardous waste, Municipal waste & sewage)

2.3 EIA Process and Procedures in Sabah

A primary objective of the Environmental Protection Department (EPD) is to implement an EIA system that will contribute towards responsible, effective and environmentally sound economic development in Sabah (EPD, 2005). To achieve this goal, the EIA procedure established by EPD focuses on:

i. Appropriate and realistic Terms of Reference for the assessment. This will allow for a EIA study, that should vary in breadth, depth and type of analysis, depending on the project;
ii. Prioritisation and prediction of the most significant environmental impacts;
iii. Identification of realistic, practical and feasible mitigating measures and monitoring programmes; and
iv. Transparency and openness in all steps of the procedure, from initiation to review and approval

In general, there are eight procedural steps in the EIA procedure:

i. Project Screening
ii. Selection of Environmental Consultants
iii. Preparation of Scoping Note
iv. Preparation of Terms of Reference
v. Undertaking the EIA Study
vi. Preparation of the EIA Report
vii. Submission of the EIA Report
viii. Preparation of the Agreement of Environmental Conditions

2.3.1 Step 1: Project Screening

Process where the project proponent consult the EPD as to whether or not a proposed development project is covered by the Environment Protection (Prescribed Activities) (Environmental Impact Assessment) Order 2005.

Based on the preliminary information supplied, the EPD will advise as to whether or not the project should proceed and undertake an EIA.

2.3.2 Step 2: Selection of Consultants

In the second step the project proponent should select consultants to undertake preparation of Terms of Reference (TOR) and the EIA.

The EIA consultant is responsible for the scoping activities and the preparation of TOR and to ensure the quality of the environmental impact assessment.

2.3.3 Step 3: Preparation of Scoping Note

The Environmental Consultant undertakes to prepare the scoping note in accordance with the format set by EPD. This scoping exercise allows for the identification of potential adverse environmental impacts in order to set up the Terms of Reference for the EIA study.

2.3.4 Step 4: Preparation of Terms of Reference (TOR)

A crucial step in the EIA procedure the TOR provides written framework for the proposed study to proceed in a systematic manner.

Typically, the TOR would include the following:

- Background information on the nature and extent of the project
- Scope of work for the EIA study
- Schedule and methods for determining impact, mitigation measures and monitoring programmes, including data to be collected and how (primary and/or secondary data collection)
- Activities involving key stakeholders
- Identification of consultant to undertake the study, including detailed Curriculum Vitae for each team member
- Work schedule with tentative and final completion dates

The consultant will finalise the TOR based on the EPD review of the draft TOR. The EIA study may proceed once the EPD has agreed on the final contents of the TOR.

2.3.5 Step 5: Undertaking the EIA Study

In the EIA study, the EIA consultant would need to carry out these three main assessments, namely, (i) assessment of the environmental impacts of the

project, (ii) assessment of mitigating measures, and (iii) assessment of subsequent monitoring programmes.

For each of the assessments, a three-pronged strategy would be carried out by the EIA consultant, namely (i) review of the known impacts/mitigation measures/monitoring programmes, (ii) investigation and (iii) evaluation (Table 2.2).

Table 2.2: Methodology for the EIA study

Steps / Activities	Impact Assessment	Assessment of mitigation measures	Assessment of monitoring programmes
Review	Appraisal of possible impacts	Exploration of possible mitigation measures	Exploration of possible monitoring programmes
Investigation	Focused data collection and analysis	Study measures to be implemented and how	Study which programmes could be applied and how
Evaluation	The significance of the adverse environmental impacts	The effectiveness of the mitigation measures	The reliability of the monitoring programmes

2.3.6 Step 6: Preparation of the EIA Report

The main purpose of an EIA report is to clearly list and describe what has been assessed and recommended. Each of the environmental issues defined in the TOR or identified during the EIA study, has to be assessed in relation to: (i) environmental impact, (ii) possible and recommended mitigation measures, and (iii) recommended monitoring requirements.

The findings of an EIA study need to be documented in a clear and concise manner devoid of unnecessary technical details. The usefulness of an EIA report is measured by how the potential problems are foreseen and addressed with adequate and straightforward answers and proposals. Thus in this step, the EIA consultant is required to adhere to the EPD requirements and 'standard table of contents' (Table 2.3) in the preparation of the EIA report, and prepare the EIA report in line with the EPD chapter-by-chapter recommendations.

Table 2.3: Standard table of content for an EIA report

Chapter no.	Title
1	Executive summary (non-technical summary)
2	General Information
3	Project Description
4	Impact prediction and evaluation
5	Recommended mitigation measures
6	Recommended monitoring programme
Annexes	Annex 1. Baseline environmental conditions
	Annex 2. Methodologies and analysis data
	Annex 3. List of references
	Annex 4. TOR and consultant activities

2.3.7 Step 7: Submission of the EIA Report

The finalised EIA report is submitted to the EPD for reviewing. The review process by the EPD seeks to ensure that impartial and proper consideration of the EIA report takes place, and includes:

- A critical review of the environmental impact assessments made, and the mitigation measures and monitoring programmes proposed in the EIA report
- To request additional information if deemed necessary.

The review of the EIA report will be considered finished when it is found that:

- The environmental impact assessment is sufficient for the EPD to assess the most important environmental effects of the project,
- The proposed mitigation and monitoring measures are found to be appropriate, realistic and sufficiently detailed to be used in the formulation of the Agreement of Environmental Conditions.

The decision whether to approve or reject the EIA report are based on the information and findings of the report and also based on a holistic assessment of the impacts of the projects in relation to:

- Each of the environmental issues being investigated;
- Government policies and plans; and
- Assessments and recommendations made by other governmental departments and authorities.

2.3.8 Step 8: Agreement of Environmental Conditions

The Agreement of Environmental Conditions (AEC) is an essential step in the EIA procedure. In the Agreement the project proponent will be legally bound

to undertake the specific environmental mitigation measures and monitoring programmes and to bear the costs for environmental mitigation measures relating to the project.

The EPD will draft and forwarded the Agreement to the project proponent. If agreement has been reached on the environmental conditions, the project proponent will be called to the EPD in order to sign the Agreement of Environmental Conditions in the presence the Director of the EPD. With the signing of the Agreement of Environmental Conditions the project is environmentally approved and may proceed to the next stage of implementation.

The project proponent is obligatory to implement and monitor the mitigation measures and monitoring programmes as specified in the Agreement of Environmental Conditions.

If the Agreement of Environmental Conditions cannot be established, the EPD will forward an environmental non-approval letter to the relevant project approving authorities.

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