FLINDERS UNIVERSITY

SCHOOL OF THE ENVIRONMENT

Master Thesis

Evaluating the effectiveness of EIA system in Vietnam: a synthesis approach of key stakeholder perspectives and content analysis

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ABBREVIATIONS

CFF	Commune Fatherland Front
DEP	Department of Environmental Protection
DONRE	Department of Natural Resources and Environment
EIA	Environmental Impact Assessment
EIA&A	Environmental Impact Assessment and Appraisal
EIS	Environmental Impact Statement
EP	Environmental Protection
EPP	Environmental Protection Plan
FDI	Foreign Trade Investment
IEE	Initial Environmental Examination
IUCN	International Union for Conservation of Nature
LOI	Law on Investment
LEP	Law on Environmental Protection
MONRE	Ministry of Natural Resources and Environment
NEPA	National Environmental Policy Act
NGO	Non-Governmental Organisation
PPC	Provincial People Committee
SEA	Strategic Environmental Assessment
UNDP	United Nations Development Program
VEA	Vietnam Environment Administration

SUMMARY

Vietnam has adopted Environmental Impact Assessment (EIA) as its key instrument for environmental management since 1993. Since then, Vietnam's EIA system has undergone numerous major improvements via a number of legislative documents such as the *Law on Environmental Protection* in 2005, and 2014 and many associated circulars and decrees. Country wide thousands of development proposals are required to undertake EIA each year. Currently, Vietnam has a relatively strong legal framework for the implementation of EIA; however, as with other developing countries, its performance in practice faces several challenges. Therefore, its contributions to the decision making process for development activities are questionable. This research project aims to evaluate comprehensively the quality of the EIA system in Vietnam to find out why gaps remain between theory and practice. Based on the evaluation appropriate recommendations are proposed to improve the system.

DECLARATION

I certify that this thesis does not incorporate without acknowledgment any material previously submitted for a degree or diploma in any university; and that to the best of my knowledge and belief it does not contain any material previously published or written by another person except where due reference is made in the text.

Signed: 

Date: 04 July 2016

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CHAPTER 1. INTRODUCTION

1.1. Introduction

Following the implementation of the *National Environmental Policy Act* (NEPA) in the United States in 1970, Environmental Impact Assessment (EIA) has been adopted as an important instrument for environmental protection and sustainable development by more than 100 countries and jurisdictions, and international development and funding agencies throughout the world (Wood 2003a). There is remarkable evidence about the proficiency of EIA in the decision making process in the United States (Wood 2003b), United Kingdom (Barker & Wood 1999), Canada (Gibson 1992) and Australia (Harvey & Clarke 2012). Consistent with that, continuous efforts have also been made towards evaluating and enhancing the effectiveness of EIA systems across the globe (Annandale 2001; Harvey & Clarke 2012; Jay et al. 2007; Lee et al. 1994; Morgan 2012; Nadeem & Hameed 2008; Ortolano et al. 1987; Wood 2003a). It can be argued that reaching an overall judgement of an EIA system is challenging and the issue of effectiveness has been only partially addressed by the research community (Cashmore et al. 2004; Wood 2003b). It is widely agreed that although EIA procedures may work sufficiently in one political situation it may experience practical shortcomings in other legal frameworks (Ortolano et al. 1987); therefore, there is always the need to investigate more about how EIA is practised globally. As Vietnam is a developing country, a critical evaluation of the EIA system in the country will bring better understanding as to other countries of similar background.

Vietnam officially adopted EIA as an important legal instrument for environmental protection in 1993 in its environmental protection law. Through this law, environmental impact assessment was for the first time considered as a compulsory element of the decision making process for any socio-economic development projects that may create significant environmental risks. Since then, the technical and legal framework for EIA in Vietnam has been reviewed and updated progressively: in the *Law on Environmental Protection* (LEP) 2005, and 2014 and in numerous circulars, decrees and technical guidelines. It is argued that while Vietnam has a relatively strong legislation provision for EIA, in practice it has several weaknesses (Clausen et al. 2011; Doberstein 2003; Obbard et al. 2002). Consequently, a number of environmental disasters caused by factories that causing billions of US dollars in damage have occurred in Vietnam. For example, the Vedan monosodium glutamate factory released their untreated sewage that seriously damaged the ecosystem of Thi Vai River for 14 years before being detected in 2008 (Nguyen & Pham 2011); or the release of untreated sewage from the Formosa steel plant in April 2016 that killed thousands of tons of fish and seriously damaged the marine ecosystems of some central provinces of Vietnam (Mai 2016).

This research, therefore, aims to evaluate the role and effectiveness of Vietnam's EIA system in the decision making process, and to find out more about why and how its limitations and weaknesses have been created and how the EIA system in Vietnam can achieve its substantive goals.

1.2. Project details

1.2.1. Research questions and objectives

This research aims to answer the question: how effective is Vietnam's EIA system?

In order to answer the question, the objectives of the research project are:

- To develop an evaluation framework to examine Vietnam's EIA system;
- To describe the development of Vietnam's EIA system and its current EIA process;
- To identify strengths and barriers to the effectiveness of Vietnam's EIA system;
- To understand stakeholder perceptions of the EIA system in Vietnam;
- To identify plausible improvements to Vietnam's EIA system.

1.2.2. Rationale

EIA systems vary across the globe, especially in the developing world. An EIA procedure may work satisfactorily in one political situation yet it may face obstacles in other legal frameworks, therefore, there is always the need to investigate more about how EIA is practised globally. It is also critical to note that evaluating an EIA system is challenging, particular in collecting reliable data where criticism is limited and sharing "negative" information or political viewpoints is considered as sensitive in some aspects.

Vietnam adopted EIA early as an important environmental management instrument to minimise the environmental impact of its economic boom and rapid industrialisation since the 1990s. Since then, each year, thousands of major socio-economic development projects have gone through the country's EIA system (Toan 2015). During this practical process, the system had to deal with a number of obstacles and shortcomings (Clausen et al. 2011; Kinh 2015; PanNature 2009; Sang 1997; Toan 2015); therefore, it has been reviewed and improved continuously in response to the practical requirements. A comprehensive evaluation of Vietnam's EIA system needs to identify the vital outcomes of how and where the system is effective and how to enhance its performance. It will also bring a means of better understanding to the how the EIA system works in one particular developing country.

CHAPTER 2. THE EFFECTIVENESS OF AN EIA SYSTEM: A REVIEW OF LITERATURE

2.1. Basic knowledge of EIA

Environmental Impact Assessment (EIA) refers to "the evaluation of the effects likely to arise from a major project significantly affecting the natural and man-made environment" (Wood 2003b, p. 1). According to Ortolano et al. (1987, p. 285), it can be also generally defined as "the process of elaborating on the environmental effects of alternative actions and making the premises of decisions explicit, reduces the prerogatives of project proponents and often forces them to account publicly for their actions". EIA was proposed for the first time in 1969 by the United States *National Environmental Policy Act* (NEPA) that required all federal agencies to take the environmental impacts into account within their decisions. As an environmental management and planning tool, Ortolano and Shepherd (1995) argued that the core goal of EIA is to inform interested stakeholders of the adverse environmental impacts likely to be caused by a proposed project and its alternatives and hence, to improve the quality of decision making processes.

EIA is considered to be the core element of environmental management in order to anticipate potential consequences of development activities on the environment and has been adopted increasingly by many nations across the globe. Prior to the 2000s, EIA was practised in more than 100 countries including two thirds of the world's developing countries in various forms, from legal requirements to more general guidelines or *ad hoc* procedures (Ortolano et al. 1987; Sadler 1996; Wood 2003b). The main features and steps of an EIA system are customised based on the particular characteristics of each country or region's jurisdiction and vary internationally, nationally and regionally. Australia, for instance, has eight independent EIA jurisdictions each of which implements and practises its own procedures (Harvey & Clarke 2012).

Generally speaking, it is widely accepted that the main features of an EIA system consists of: legal provision, organisational structure, and implementation procedures. The implementation procedures usually consist of screening of actions, scoping of impacts, alternatives selection, EIS preparation, public consultation, EIS review process, and auditing and monitoring.

It is reported that there are huge differences among EIA systems in the developed world and in developing countries and there are also some current challenges of practising EIA across the globe (Ortolano & Shepherd 1995; Wood 2003a). Some of these common contemporary challenges are (Marara et al. 2011; Nadeem & Hameed 2008; Ortolano & Shepherd 1995; Sadler 1996; Wood 2003a):

- EIA is rarely integrated sufficiently into decision making system;
- EIA requirements are often exempted under substantial political pressure;
- EIA is often delivered late in the project cycle and serves largely to suggest mitigations for a project already selected;

- Environmental objectives are not given the same weight as economic performance;
- Cumulative impacts are frequently not assessed;
- Inadequate participants of various stakeholders during the EIA procedure;
- Limited converge of impacts;
- Poor quality of EIA reports;
- Weak implementation of mitigation measures and proposed mitigation measures may not be implemented;
- Post-project monitoring is rarely conducted; and
- EIA does not ensure environmentally sound projects.

2.2. What is an effective EIA?

The concept of an effective EIA system has been debated for a long time; however, it is widely accepted that the fundamental goal of EIA is to avoid significant environmental impacts of development activities via well-informed decision making processes; therefore, the effectiveness of EIA can be defined by the extent to which it achieves this central objective (Cashmore et al. 2004; Jay et al. 2007; Morgan 2012; Ortolano et al. 1987; Sadler 1996; Wood 2003a). To begin with, Ortolano et al. (1987) suggested a starting point by proposing five main components that formulate an effective EIA system, including:

- Legal provision and procedure compliance;
- Sufficient EIA documents;
- Sufficient methods for impact assessment;
- Influence on alternative selection and decision making process to minimise adverse impacts;
- Rational balance for environmental aspects relative to economic and technical factors.

Ortolano et al. (1987) used six different "control mechanisms" as core elements to explain the performance of EIA procedures in various social and political contexts, namely: *procedural control, judicial control, evaluative control, instrument control, professional control, and direct public and agency control*. They believe that the effectiveness of EIA systems originated from "intraorganisational and interorganisational processes and structures" which ensured that environmental considerations were well-integrated in the planning and decision making process (Ortolano et al. 1987, p. 287).

Following this approach, Leu et al. (1996) took further steps to define ten fundamental components and nine quality control mechanisms for an effective EIA system that they adapted to explain EIA effectiveness in a wider scope as shown in Box 2.1 below:

Box 2.1 Fundamental elements of EIA effectiveness

1. Environmental legal provision and technical guidelines;
2. Administrative framework
3. Well-defined EIA procedure
4. Roles of stakeholders participating in EIA procedure
5. Status of EIA report
6. Monitoring and enforcement
7. Effective EIA implementation in practice
8. Resources for EIA implementation
9. International interactions
10. Strategic environmental assessment

Source: Leu et al. (1996)

In addition to the six mechanisms inherited from Ortolano et al. (1987), Leu et al. suggested three more elements: *legislative control, follow-up control and international control*. These mechanisms were expected to

> *cover not only the impetus of introducing and conducting EIA, but also the quality control and management of the EIA system itself" and therefore "can be applied to gauge the completeness, adequacy and effectiveness of an existing EIA system, at different stages, in a variety of social and political contexts*. (Leu et al. 1996, p. 4)

Sadler (1996, p. 21) proposed 14 important guiding principles for EIA effectiveness tailored from key factors such as *well-founded legislation; appropriate procedural controls; incentive for public involvement; problem and decision-orientation and follow-up and feedback capability* (see Box 2.2). These guiding principles were based on lessons from two decades of experience of EIA in practice across the globe.

Box 2.2 Guiding principles for effective EIA

1. Clear mandate and provisions: vested in law, have specific, enforceable requirements, and prescribe the responsibilities and obligations of proponents and other parties;
2. Explicit goals and objectives: a clear purpose and dedication to achieving environmental protection and/or sustainable development;
3. Uniform, consistent application: automatically applied to all proposals and actions with potential environmental effects and consequences;
4. Appropriate level of assessment scaled to the degree of environmental significance and extent of public concerns associated with a proposal;
5. Relevant scope of consideration: examine all pertinent environmental options to and aspects of a proposal, including cumulative effects, interrelated socio-economic, cultural and health factors, and sustainability implications;

6. Flexible, problem-solving approach: adapted to deal with a range of proposals, issues, and decision making situations;
7. Open, facilitative procedures: transparent and readily accessible, with a traceable record of assessment decisions and timely opportunities for public involvement and input at key stages;
8. Necessary support and guidance: requisite level of resources and procedural guidance for conducting assessments in accordance with requirements, principles and standards of good practice;
9. "Best-practice" standards: undertaken with professionalism, objectivity and credibility, as identified by "best-practices" in impact science, public consultation and process administration;
10. Efficient, predictable implementation: applied in a timely manner that fosters certainty, minimises delay and avoids unnecessary burdens on proponents;
11. Decision-oriented: provide sound, tested practical information that is readily usable in planning and decision making;
12. Related to condition-setting: explicitly linked to approvals and, as necessary, to specified terms and conditions;
13. Follow-up and feedback in-built mechanisms: explicit measures for checking on compliance with conditions, monitoring effects, managing impacts, and auditing and evaluative performance; and
14. Cost-effective outcomes: promote actions that ensure environmental protection at least cost to society.
Source: Sadler (1996)

According to Sadler (1996), the best case of EIA performance is demonstrated when final approvals are made via a well-structured, adaptive and reflexive system that provides satisfactory information about the negative consequences and appropriate mitigation methods for major impacts, including cumulative impacts and social and health risks of the proposals that are generated by sufficient technical methods to ensure that the most environmentally friendly alternatives have been chosen.

More recently, with the growing concern for sustainable development, there have been increasing efforts to integrate sustainable development goals with EIA effectiveness (for instance: Cashmore et al. 2004; Marara et al. 2011). Cashmore et al. (2004, p. 298) suggested that one effective EIA system should deliver substantive outcomes to mitigate environmental impacts of development activities toward achieving sustainable development.

Generally speaking, an effective EIA system should be rationally designed and improved continuously to achieve its fundamental goal of avoiding and mitigating adverse impacts of development in an appropriate social, political and cultural context. Therefore, evaluating the effectiveness of an EIA system should be focused on the extent to which its goal is reached.

2.3. Evaluating the effectiveness of EIA systems

There have been numerous of efforts toward evaluating the effectiveness of EIA systems in particular political and social contexts. Generally, these efforts focus on evaluating the efficiency and cost-

effectiveness of EIA on decision making processes. These studies concentrate on two typical approaches, namely disaggregate and aggregate approaches; and four key aspects: *procedural control, operational control, substantive control and cost-effective control*. Characteristics of these mechanisms are discussed below.

To begin with, Lee et al. (1994) proposed two typical approaches to measure the performance of an EIA system: the *disaggregate approach* and the *aggregate approach*.

The disaggregate approach focuses on reviewing EIA efficiency via different steps of an EIA system separately, then, investigating the interdependencies of their performance. For example, Lee at al. (1994) divided EIA procedures into three major steps such as: pre-submission of an EIS, submission of an EIS and post-submission of an EIS. The central focus of the disaggregate approach is qualifying a satisfactory EIS against the "ES review package" developed by Lee and Colley (1991) and then reflecting the EIS score with other indicators of quality for the other steps of the EIA and investigating the interconnections between the EIS score and other indicator results.

The aggregate approach, on the other hand, aims to assess the overall outcomes of the EIA process by applying assessment criteria based on environmental effectiveness, cost effectiveness and balanced decision making:

- Environmental effectiveness: to what extent EIA influences project modification in order to minimise significant environmental impacts.
- Cost effectiveness: to what extent EIA delivers environmental improvements at least cost.
- Balanced decision making: the weight given to environmental factors, in conjunction with costs and material factors in the decision making process.

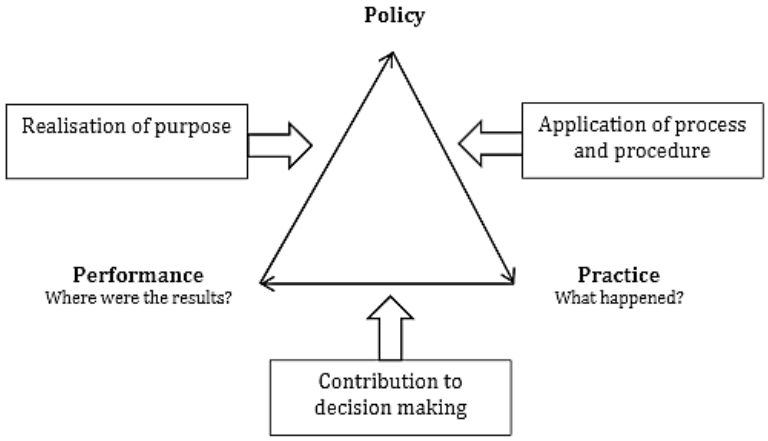
This approach, for example, has been applied to indicate the proportion of proposals that have been modified to be environmentally satisfactory as a result of an EIA. Because of the complexities of assessing the performance of any process, the core element of this approach is given to the choice of performance indicators and to obtaining reliable data by which steps may be measured.

Following this approach, Sadler (1996) defined three different important aspects that every evaluation criteria should rely on: *procedural criteria, substantive criteria and transactive criteria*.

- Procedural criteria: review the compliance of the EIA processes based on established provisions and principles;
- Substantive criteria: reflects the overall success of the EIA process in achieving its objectives; and
- Transactive criteria: considers the cost-effectiveness of the EIA process in delivering its outcomes.

Sadler developed an EIA effectiveness triangle (Figure 2.1) that demonstrates the interrelation between policy, performance and practice factors within an EIA system. This triangle provides a clear and vital framework to develop a method of evaluating the effectiveness of any EIA system.

Figure 2.1 The EIA effectiveness triangle (source: Sadler 1996, p. 40)



Sadler (1996) provided a useful method by which to explore the effectiveness of an EIA system examining the interaction of interrelated components: *institutional controls* (the legal provisions, requirement for compliance and procedures of an EIA system) and *operational competence* (effectiveness of every stage of the EIA process in practice). He proposed rigorous analysis of all aspects of the EIA including technical, consultation and administration components as illustrated in Table 2.1.

Table 2.1 Matrix for evaluation of operational preference for key stages and activities

Steps of the EIA Process	Technical analysis	Public Consultation	Process Administration
Screening Scoping Prediction Significance evaluation Mitigation Monitoring Implementation Audit Evaluation			

Source: Sadler (1996, p. 44)

Wood (1995, 2003a, 2003b) developed 14 criteria (Box 2.3) to evaluate the procedural effectiveness of EIA for all steps of the EIA process via the interactive relation between EIA requirements and operation. He integrates the comparison of the costs and benefits. Wood judged the effectiveness of an

EIA system from structural viewpoints and operational processes rather than the substantive outcomes of a system. He argued that his criteria can be adopted to analyse the effectiveness of any EIA system by judging it against an "ideal system". His argument was that if an EIA system fails to meet a significant proportion of the evaluation criteria, it not only falls short of recognised international good practice but cannot deliver its intended objectives of avoiding and mitigating environmental impacts of development activities.

Box 2.3 EIA system procedural effectiveness evaluation criteria

1. Is the EIA system based on clear and specific legal provisions?
2. Must the relevant environmental impacts of all significant actions be assessed?
3. Must evidence of the consideration, by the proponent, of the environmental impacts of reasonable alternative actions be demonstrated in the EIA process?
4. Must screening of actions for environmental significance take place?
5. Must scoping of the environmental impacts of actions take place and specific guidelines be produced?
6. Must EIA reports meet prescribed content requirements and do checks to prevent the release of inadequate EIA reports exist?
7. Must EIA reports be publicly reviewed and the proponent respond to the points raised?
8. Must the findings of the EIA report and the review be a central determinant of the decision on the action?
9. Must monitoring of action impacts be undertaken and is it linked to the earlier stages of the EIA process?
10. Must the mitigation of action impacts be considered at the various stages of the EIA process?
11. Must consultation and participation take place prior to, and following, EIA report publication?
12. Must the EIA system be monitored and, if necessary, be amended to incorporate feedback from experience?
13. Are the financial costs and time requirements of the EIA system acceptable to those involved and are they believed to be outweighed by discernible environmental benefits?
14. Does the EIA system apply to significant programmes, plans and policies, as well as to projects?

Source: Wood (1995)

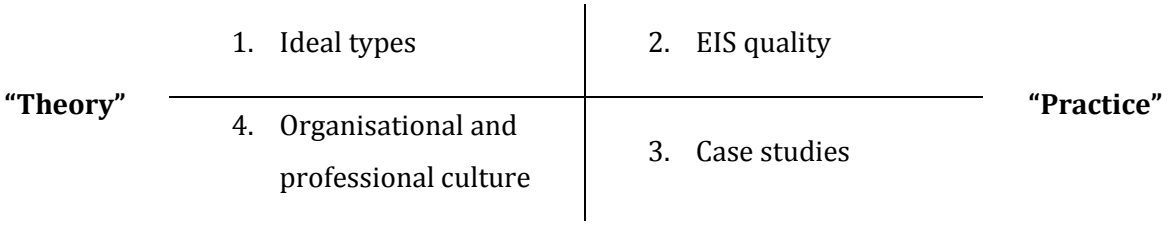
In addition to these criteria, Emmelin (1998) attempted to systematise approaches to EIA evaluation by grouping them into four main categories determined via two main dimensions, as is shown in Figure 2.2.

The first dimension focuses on the distinction between EIA *system structures* on the one hand and *implementation structures* on the other. In other words, dimensions vary by structural aspects of an EIA system and the functional context where that system is implemented.

The second dimension lies between the theoretical side that consists of certain principals designed to operate an EIA system and the practical side of how that EIA system functions. To be more specific,

Emmelin's idea was to consider the interrelationships of an EIA system and the organisational and professional culture (the roles of different key players participating in that system), in both theoretical and practical contexts.

Figure 2.2 Main categories of EIA effectiveness methodological approach (source:Emmelin 1998, p. 132)



Based on these two dimensions, Emmelin grouped efforts to evaluate the effectiveness of EIA systems into four main categories: *ideal types, EIS quality, case studies and organisational and professional culture*. The first group consists of studies that evaluate EIA effectiveness against an ideal system (for instance: Wood 1995). Studies in the second group focussed on evaluating EIA documents such as EISs as a product of the system (for instance: Lee & Colley 1992). The third group consists of studies that evaluated EIA effectiveness through surveys, interviews and other statements by those who participate in the system (for instance: Sadler 1994). Finally, the last category looks at the implicit perception of those who are involved in the system exploring personal interests, professional views, norms and ideals (Emmelin 1998).

Emmelin provided a promising overview of methods for evaluating EIA effectiveness with the idea that researchers would pick the most appropriate approach based on their desired outcomes. Notwithstanding, the effectiveness of an EIA system is the result of complex processes and the complex interrelations between numerous factors and various stakeholders that require a combination of approaches from more than one of Emmelin's categories. For example, a good EIS can be considered as a vital factor for a sound EIA, but alone is not adequate to guarantee an effective EIA system (Lee et al. 1994).

Evaluating the effectiveness of EIA systems in developing countries is more complicated as EIA itself lies in complex interactive relations, such as conflict of interest between economic development and environment protection and political influences. Annandale (2001), for example, used a combination approach of Emmelin's groups 1 and 4 in order to evaluate EIA effectiveness in the Maldives.

Overall, evaluating the effectiveness of an EIA system should focus on where, how and to what extent an EIA is effective in order to improve the system. There is a need for an integrated approach to investigate substantive outcomes of main elements within an EIA system and its contribution to the overall effectiveness.

CHAPTER 3. METHODOLOGY

3.1. Developing an analytical framework for evaluating the effectiveness of the EIA system in Vietnam

This study utilises an integrated approach to evaluate the effectiveness of Vietnam's EIA system. The approach evaluates procedural effectiveness toward achieving substantive results of sustainable development, and provides an overview of the effectiveness of the main elements of the system. The overall objective is to find out where, how and why the system is effective in order to enhance its performance and contribution to environmental management.

The evaluation framework of this research was developed on the basis of the development of the key principles of an effective EIA system as presented in Chapter 2. Procedural criteria introduced by Wood (1995) were selected as the base upon which to develop an evaluation framework for this research. Wood's criteria have successfully been applied by many nations in many studies evaluating EIA performance (For example: Annandale 2001; Harvey & Clarke 2012; Marara et al. 2011; Nadeem & Hameed 2008; Wood 2003a). 'Yes' or 'no' questions have been improved by including an effectiveness scale. This is better to evaluate an EIA system in a developing country because as Annandale (2001) states, in practice some EIA systems may not fulfil Wood's criteria yet, it is not reasonable to conclude that these systems are fundamentally flawed or deficient. Besides, EIA effectiveness in developing countries is influenced by the key factor that most of their procedures have adopted from what are more in common with western EIA models than their socio-economic and institutional conditions (Appiah-Opoku 2001).

Another important thing to note is that evaluating the extent of the success of each element within the EIA system against an "ideal" EIA system is complex. One paradigm system may work successfully in one country or jurisdiction but falls far behind expectation in others. Therefore, there is a need to establish an appropriate set of assessment criteria that can be applied flexibly to any EIA systems. The best approach to evaluate the success of each element within one EIA system should be to focus on the perspectives of key stakeholders within the system. The satisfaction of EIA practitioners within an EIA system, and their viewpoints about the system, provide a valuable perspective towards evaluating the effectiveness of that system. As a result the evaluation framework developed in this research is no longer limited to the first triangle as Wood's was (see Figure 2.1). It expands to the second triangle to evaluate Vietnam's EIA performance toward the more practical and substantive outcomes in the decision making process.

The disaggregate approach developed by Lee et al. (1994) was the primary approach for this research project. However, by gathering stakeholder's perceptions via interview, the researcher also attempted to integrate the evaluation criteria of the aggregate approach by integrating the environmental

effectiveness, cost effectiveness and balance in decision making criteria, while evaluating the effectiveness of each element within Vietnam's EIA system as presented in Table 3.1.

Table 3.1 Evaluation framework for the effectiveness of Vietnam's EIA system

	Criteria	*Effectiveness*					*Comment*
		1	*2*	*3*	*4*	*5*	
1	How effective is the legal provision for EIA?						
2	How effective is the consideration of alternatives in EIA?						
3	How effective is the screening process?						
4	How effective is the current scoping of impacts?						
5	How effective are Environmental Impact Statements in supporting decision making?						
6	How effective is the EIS review process?						
7	How effective are appraisal committees in decision making for EIA?						
8	How effective is monitoring and auditing and mitigating of impacts?						
9	How effective is public consultation and participation in the EIA process?						
10	How effective are the human resources of the current EIA system?						
11	How effective is the financial resource spending for the EIA?						

3.2. Research instruments

In order to achieve the aims and objectives of this research project a new evaluation framework has been developed for this study combining various criteria introduced in previous chapters, (see Table 3.1). Two main research methods have been undertaken to apply the framework: a content analysis of existing documents and interviews with key stakeholders.

3.2.1. Content analysis

Content analysis was used as the key method to develop an evaluation framework for this research as presented in Chapter 2 and Section 3.1. In addition, in carrying out the evaluation and practical

performance of the EIA system in Vietnam peer reviewed literature (journal articles, conference papers), grey literature (government documents, reports, and legal documents), and media reports have been collected and analysed against the framework criteria of Table 3.1.

3.2.2. Interviews

In order to gain insights from EIA practitioners and others affected by or interested in the EIA process a series of interviews were planned to seek a range of perspectives.

Based on the evaluation framework in Table 3.1, a set of interview questions was created including a combination of closed and open-ended questions (see appendix 1). The interview schedule encouraged respondents to express their opinions about the effectiveness of the key elements of Vietnam's EIA system and it also asked respondents to explain how they thought the system could be improved.

3.2.3. Selection of interviewees

A list of potential participants was compiled by scanning and selecting information sources and databases published on the internet. These sources included staff and contact lists of environmental protection agencies and government bodies; the Vietnamese Association for Environmental Impact Assessment; members of the Vietnamese Association for Conservation of Nature and Environment; and authors of media articles about EIA.

3.3. Ethics approval

Because this research involved approaching people it was subject to ethics approval. The project details needed to go through the human ethics approval process at Flinders University. The research project was approved by the Social and Behavioural Research Ethics Committee in February 2016.

3.4. Conducting interviews

Invitation emails were sent to 46 potential participants currently working in five groups involved in the EIA system in Vietnam:

- EIA authorities;
- International NGOs and donors;
- Local NGOs and professional organisations;
- Companies and consulting agencies; and
- Independent experts.

The characteristics of each respondent group are presented in Table 3.2. Interviewees were chosen through a mixture of random sampling and purposeful sampling methods from these five participant groups. Key organisations and persons were selected to ensure that the interviews would gather "rich

information". Others potential participants were selected randomly to enrich the diversity of viewpoints. Actual final participants were selected based on the criteria below:

- Having significant experience of the EIA system in Vietnam;
- Representing all five groups mentioned above;
- Covering the different levels of EIA in Vietnam (e.g. provincial and local).

Table 3.2 Characterisations of the respondents groups

Authorities	Representatives of government in environmental protection. Key players in establishing the country's EIA regulations, appraisal of EISs, and decision making process. They have a fundamental understanding of the complete EIA system, from the application from the proponent to the decision making as well as the follow-up process from the management viewpoints.
Local NGOs and professional organisations	Some of these may participate in the system and some are working indirectly with Vietnam's EIA system and may be interested in particular aspects of the system, such as public participation, biological conservation, natural resource management, and wildlife protection. May have objective insights about the effectiveness of the system.
International NGOs and donors	International NGOs and donors have an independent overview of Vietnam's EIA system performance. May have comparative viewpoints of the systems compared with those in other countries.
Companies and consultant agencies	EIA practitioners who are working directly in the system. They have fundamental knowledge of the complete EIA system in practice. Their viewpoints will provide valuable insights about some possible obstacles of EIA implementation and solutions to improvements.
Academic experts	Have a theoretical understanding of the EIA process and are likely to have researched different aspects of the EIA concept and its application. Some of them may have practical experience as EIA consultants.

3.4.1. Response rate and the interview schedule

Of the 46 invited people, 23 agreed to participate in the interviews. A number of those invited did not respond. Five individuals declined to be interviewed because of: lack of time available due to the pressure of work commitments; they had switched to another sector so did not feel knowledgeable about the current EIA system, or were not in good health.

In total, 20 face-to-face interviews were conducted during March and April, 2016 in Hanoi, Vietnam. Three of the 23 respondents who agreed to participate in the research then eventually could not be involved in the interviews due to their time schedules.

Participants were asked to give their opinions about the effectiveness of the whole EIA system in Vietnam and to suggest some possible solutions to further improve the system based on their experiences (details of the interview schedule are presented in appendix 1 of this thesis).

Details of the response rate are shown in Table 3.3.

Table 3.3 Response rate of interviews

Group	Invited	Agreed	Denied	No response	Interviewed
Authorities	**12**	6	1	5	**6**
Local NGOs and professional organisations	**9**	6	1	2	**4**
International NGOs and donors	**8**	4	2	2	**3**
Companies and consultant agencies	**9**	4	0	5	**4**
Academic experts	**8**	3	1	4	**3**
Total	**46**	23	5	18	**20**

The respondents who agreed to participate in the interviews stayed in touch with the researcher by email and through personal mobile phone to arrange the interview schedule. The time taken to conduct the interviews varied from 40 minutes to 1 hour. Eighteen out of 20 interviews were recorded by voice memo application in iPhone. In the other two interviews written notes were used instead of recording as requested by the interviewees.

3.4.2. Analysis

The audio recorded interviews were transcribed from Vietnamese into English and imported into a word document. This information was then imported into the qualitative data analysis software program, NVivo 11, ready for analysis. Information from the closed questions was coded and entered onto Microsoft Excel.

This chapter has outlined the methods undertaking to investigate the effectiveness of the EIA system in Vietnam and the processes needed to identify the strengths and weaknesses within the existing system and under the present legal framework. The current EIA procedure and the evolution of Vietnam's EIA system, as a core result from the content analysis will be presented in the next Chapter.

CHAPTER 4. THE EIA SYSTEM IN VIETNAM

4.1. Current EIA procedure in Vietnam

Vietnam has undergone rapid industrialisation and a significant economic boom over the last few years. Thousands of major socio-economic development projects have been implemented each year nationwide (Toan 2015). This rapid development also created tremendous pressures on Vietnam's depleted natural environment. Therefore the Vietnamese Government and international aid organisations have urgently considered EIA as "an important tool in the management of the impacts of future development of the country's natural resource base" (Clausen et al. 2011, p. 136).

Vietnam's EIA system is regulated by numerous pieces of legislation; it has a clear implementation structure, and consistent EIA procedures which are applied to major projects. The present EIA procedures in Vietnam are the result of long-term development and revision since 1993 when the country's first *Law on Environmental Protection* (LEP) was enacted.

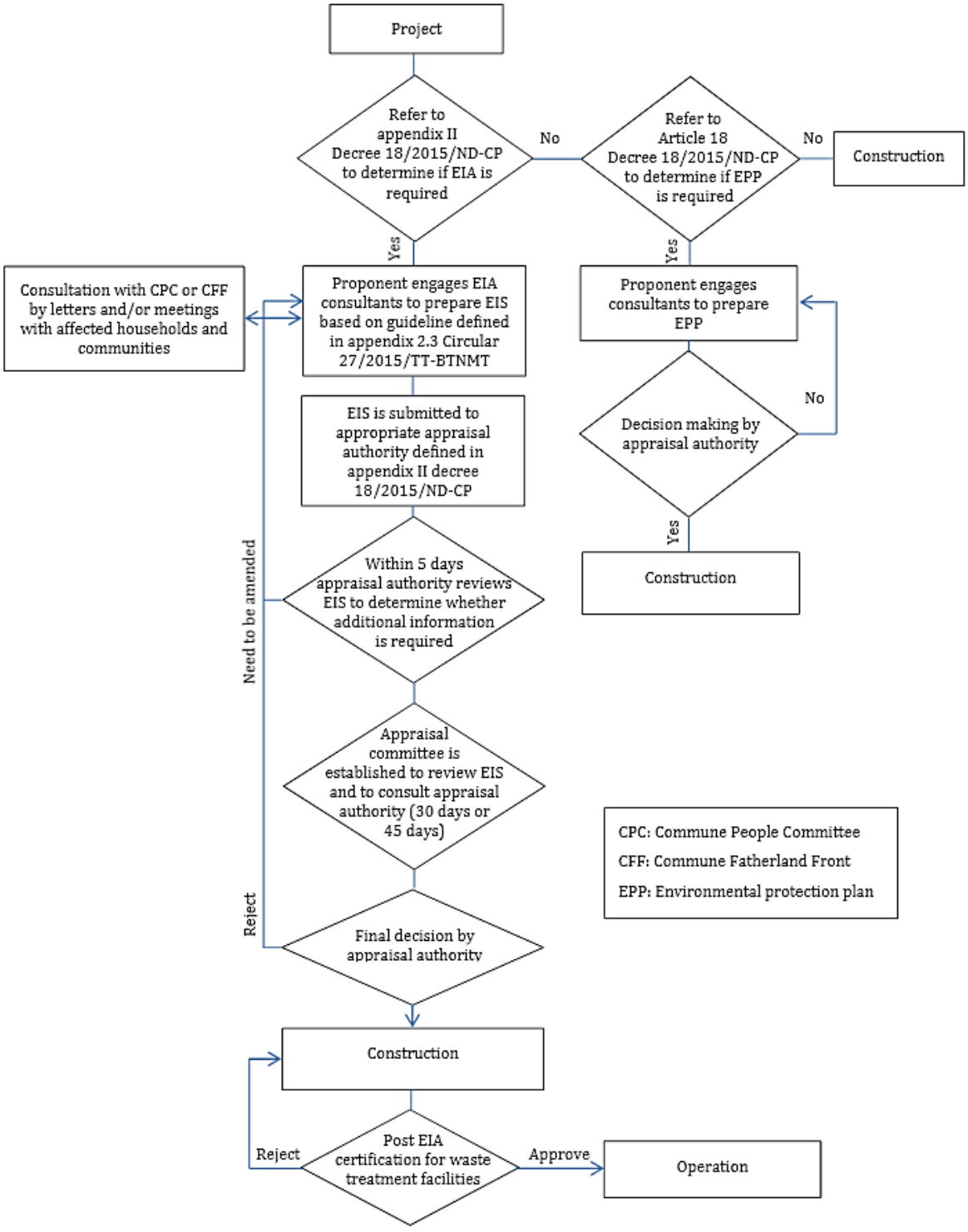
Vietnam's EIA procedure and investment registration procedure for proposed projects:

It is significant to note that in Vietnam, decision making on project approval and decision making on EIA are different processes and are often undertaken in parallel. The decision on whether each project is approved to be implemented or not will be made by an "investment licence" that is the outcome of an investment registration procedure defined in the *Law on Investment* (LOI) No. 67/2014/QH13 dated 26/11/2014 whereas EIA procedure is promulgated in LEP focusing on environmental impacts and mitigation measures of proposed projects. Even in the LEP 2014, approval of the EIS is the ground for decision making on investment, however, in practice, these two procedures are relatively independent. In short, there is a gap between the role of EIA regulated in the LEP 2014 and the LOI 2014.

To be specific, the LOI 2014 divided development projects into three main categories in which the investment licence of the project will be granted by the National Assembly, the Prime Minister or the Provincial People's Committee (PPC). As can be seen in appendix 3, the proponent will need to submit a set of application documents to apply for an investment license. The application documents submitted to the PPC do not consist of environmental contents. For a project granted by the national assembly or by the prime minister, the documents need to include an initial environmental examination (IEE) report. However, interestingly, the content of the IEE is not specifically defined in the LEP 2014 or any related legislation. During the decision making process on investment, these decision making authorities need to consult with other specialised state management agencies, including environmental protection agencies. These consulted agencies will be given 15 days to give their opinions to the decision making authorities (Vietnam National Assembly 2014b).

Generally, the EIA process in Vietnam can be divided into three main phases: EIS preparation, EIS review and post-EIS. The current process of EIA in Vietnam is described in the Figure 4.1 below.

Figure 4.1 The current EIA process in Vietnam



4.1.1. EIS preparation stage

The screening process in Vietnam is determined by law. The LEP 2014 and decree 18/2015/ND-CP define a list of projects for which an EIA will automatically be required. Proponents, by referring to the legislation, can determine exactly whether their project will trigger an EIA or not. In some cases an EIA

will not be compulsory and a proponent may need to prepare an Environmental Protection Plan (EPP) which contains a proposal of mitigation measures to avoid negative impacts during the preparation, construction and operation phases of the project. The proponent must submit their EPP to the appropriate environmental protection agency. Only a small number of projects which are unlikely to cause any negative impacts on the environment are exonerated from EIA and the EPP. The list of these benign projects is also defined in decree 18/2015/ND-CP.

If an EIA is triggered for a project, the proponent will have to follow guidelines promulgated in circular 27/2015/TT-BTNMT to prepare an EIS and submit it to an appropriate environmental protection agency for appraisal. According to the LEP 2014, EIA can be appraised by the *Ministry of Natural Resources and Environment* (MONRE) or different ministries depending on the sector. It can also be undertaken by the *Department of Natural Resources and Environment* (DONRE) at provincial level depending on its scale or project locations. The guidelines in circular 27/2015/TT-BTNMT are general and focus mainly on the main elements and contents that need to be included in the EIS and applied to all projects, rather than the process of conducting EIA for any particular projects.

Scoping of issues in EIA, however, is not clearly defined in the legal documents of Vietnam's EIA system and scoping is conducted by EIA consultants. Defining the scope of impact assessment at this stage, therefore, is dependent on the capacities of the EIA practitioners.

After proponents or their consultancies finishing a draft of an EIS, the proponent must publish their reports and send them to the local people's committee and local civic organisations seeking their feedback. These organisations are given 15 days to respond. If no response is received it is considered that local communities agree with the proposals. In addition, the project proponent must organise a meeting with representatives of affected communities to listen to and respond to the communities' concerns about the project. An overview of this feedback and minutes of meetings is included in final EIS, together with a response to feedback by the proponent.

4.1.2. EIS review

Once an EIS is completed, proponents need to refer to article 14 of decree 18/2015/ND-CP dated 14/02/2015 to determine which agency is responsible for appraising their report and submit their EIS together with other project documents to that agency. To be more specific, based on the sector, scale, locations and other characteristics of the project defined in the decree 18/2005/ND-CP, its EIS will be appraised by MONRE, DONRE or other Ministries.

After receiving these documents, the appraising agency is given five days to inform the proponent if their application is inadequate or invalid and to ask for supplementary information. If no further action is required for the EIS, from the day the EIS is submitted, an appraisal committee is established to evaluate EIS within 45 days for project approved by MONRE and 30 days for DONRE and other Ministries.

For all levels, the appraisal committee consists of at least seven members. One third of the committee must have more than seven years' experience in EIA. Opinions given by the committee will provide the basis to the decision maker about whether to approve the EIS of the project. The results of the appraisal process can be:

- EIS is approved without amendment;
- EIS is conditionally approved;
- EIS is rejected.

In practice, hardly any EIS is approved without amendment. In cases where the EIS is approved conditionally, proponents will need to enhance their EIS with some amendments in response to the comments of committee members. Should an EIS be refused, the proponent must re-conduct the EIA and re-submit a new EIS for appraisal. This, however, does not mean that the project is refused.

4.1.3. Post-EIS

Based on the LEP 2014, approval of the EIS will be the grounds for consideration of an investment license for a project. After an EIS has been approved and received an investment grant, a proponent will produce the details of their technical and construction designs and lodge these with the specialist agencies, for example, the Ministry of Construction, the Ministry of Science and Technology before implement the project.

There are currently no clear regulations on EIA monitoring activities in Vietnam. Monitoring is the responsibility of the proponent and their construction contractors. Monitoring activities of EIA and compliance are conducted only for waste treatment facilities projects. The actions of the protection agencies otherwise only take place when there are complaints from local inhabitants.

4.2. The emergence of EIA system in Vietnam

The development of Vietnam's EIA system can be divided into four main phases:

- Before 1993 Preparation phase: typified by Vietnamese efforts to learn about EIA and pilot projects to undertake EIA as a primary instrument for environmental management.
- 1993-2005 Legalisation phase: marked the introduction of EIA in Vietnam's first LEP and following EIA legislation.
- 2005-2014 Renovation phase: experienced numerous major changes aiming to improve practical performance of the system including the decentralisation of EIA system.
- 2014-present Implementation phase: characterised by ongoing EIA implementation after the introduction of LEP 2014.

Vietnam officially adopted Environmental Impact Assessment as a vital environmental management instrument in 1993 by the promulgation of the LEP. This came about as a result of long cooperation

between development aid agencies and the Vietnamese government (Can 1994; Doberstein 2003; Sang 1997). Since then, EIA regulations have been reviewed and improved continuously in order to strengthen the effectiveness of the system (e.g. amendments to the Law on Environment Protection in 2005 and 2014). Over time, Vietnam has enacted three different versions of its environmental law and produced numerous legal documents as presented in Table 4.1. Each phase will be described below.

Table 4.1 The development of EIA legislation in Vietnam (adapted from: Ministry of Justice 2016)

No	Date	Type	Name	Content
1	20/09/1985	Resolution	246/HDBT	Strengthening the baseline survey, rational use of natural resources and environmental protection (EP)
2	12/06/1991	Decision	187-CT	Implementation of national plan on environment and sustainable development
3	25/02/1993	Directive	73-TTg	Urgent works toward EP
4	27/12/1993	Law	29-L/CTN	Law on environmental protection: clause 11, article 2; article 17; article 18 on EIA
5	18/10/1994	Decree	175/CP	Guiding implementation of the LEP 1993.
6	26/11/1994	Circular	1420-TT/MTg	Guiding implementation of EIA for current operating projects.
7	03/04/1995	Circular	715/MTg	Guiding preparation and appraisal of EIS for FDI projects.
8	06/03/1997	Circular	276 -TT/MTg	Guiding implementation of pollution monitoring post-EIA
9	20/08/1997	Circular	1100-TT/MTg	Guiding preparation and appraisal of EIS for development projects
10	29/04/1998	Circular	490/1998/TT-BKHCNMT	Guiding preparation and appraisal of EIS for development projects
11	12/07/2004	Decree	143/2004/ND-CP	Amending and supplementing Article 14 of Decree 175/CP dated 18/10/1994 guiding implementation of the LEP
12	29/11/2005	Law	52/2005/QH11	Law on environmental protection: chapter III: SEA, EIA, EP commitment
13	09/08/2006	Decree	80/2006/ND-CP	Guiding implementation of the LEP 2005
14	03/09/2006	Decree	81/2006/ND-CP	Sanctioning of administrative violations in EP
15	10/10/2006	Circular	08/2006/TT-BTNMT	Detailing implementation of SEA, EIA, and EP commitment
16	28/02/2008	Decree	21/2008/ND-CP	Amending and supplementing articles of the decree no. 80/2006/ND-CP
17	08/12/2008	Circular	05/2008/TT-BTNMT	Replacing decree 08/2006/TT-BTNMT on SEA, EIA and EP commitment
18	18/04/2011	Decree	29/2011/ND-CP	Amending and supplementing a number of articles of Decree 21/2008/ND-CP
19	18/07/2011	Circular	26/2011/TT-BTNMT	Detailing a number of articles of Decree 29/2011/ND-CP
20	29/04/2014	Decree	35/2014/ND-CP	Amending/supplementing articles of Decree 29/2011/ND-CP: SEA, EIA and EP commitment
21	05/05/2014	Circular	22/2014/TT-BTNMT	Guiding implementation of Decree 35/2014/ND-CP : SEA, EIA and EP commitment
22	23/06/2014	Law	55/2014/QH13	Law on environmental protection, Chapter II: environmental protection planning, SEA, EIA, EP plans (EPP)
23	14/02/2015	Decree	18/2015/ND-CP	EP planning, SEA, EIA and EPP
24	29/05/2015	Circular	27/2015/TT-BTNMT	Guiding implementation of Decree 18/2015/ND-CP on SEA, EIA and EPP

4.2.1. The preparation phase from 1986 to 1993

Prior to 1993, because EIA was not legally required and there were insufficient methods for assessing impact, early EIAs in Vietnam were largely *ad hoc,* isolated from official decision making processes, and some were carried out after projects had been constructed (Doberstein 2003). Vietnam formulated its first law on the environment that included EIA as a key instrument for environmental management in 1993. The main activities conducted during this phase in Vietnam included the training of EIA experts, implementation of pilot projects, elaboration of EIA regulatory documents, and adaptation of EIA methodologies (Can 1994; Obbard et al. 2002; Sang 1997).

Prior to the formulation of the LEP 1993, the Vietnamese government raised its concerns regarding environmental protection and management issues mainly because of the significant deforestation, habitat loss and waste of natural resources within the country during the socio-economic development process since the1980s (Can 1994; Obbard et al. 2002). At this time even though environmental impact assessment was not fully acknowledged in Vietnam, evaluating and mitigating significant impacts of development activities was a central focus of the country.

In 1985, the prime minister of Vietnam promulgated resolution number 246/HDBT on strengthening the baseline survey and rational use of natural resources, and environmental protection:

> *Natural resources and environmental protection has not been prioritised while the resources wastes are significant. In parallel with the consequences of the war, lack of sufficient natural resources management has led to the loss of 50% of forest area, 40% of the country's territory became barren land and hills, vegetation and aquatic resources are in abatement, quality of the environment is degraded. It is a significant risk for our country if the situation is continued.* Resolution 246/HDBT dated 20/09/1985

In light of this 246/HDBT resolution, numerous activities were undertaken thanks to both the efforts of the Vietnamese government and support from international development aid agencies (Can 1994; Sang 1997). In 1986, the Vietnamese national research program on natural resources and environment, sponsored by IUCN, carried out a national strategy on environmental protection in which a national plan on the environment and sustainable development was then promulgated in the decision 187-CT dated 12/06/1991 (Can 1994). The national plan defined seven major objectives toward environmental protection and sustainable development for Vietnam as follows (decision 187-CT dated 12/06/1991):

- Establishing environmental management agencies;
- Formulating environmental laws and policies;
- Establishing environmental monitoring systems;
- Establishing integrated plans for natural resources exploitation and development;
- Establishing sustainable development strategies for industries;

- Environmental impact assessment; and
- Formulating environment and sustainable development strategies.

In parallel with these preparatory activities, several training and "studying-by-learning" courses were conducted in universities and professional organisations in Vietnam and a number of environmental impact assessment projects were conducted for major projects. These included the Tri An, Hoa Binh, Yali, and Son La hydropower plants, Tuy Ha petrochemical refinery plant and the Bai Bang paper processing factory (Can 1994).

As one of the main outcomes of this preparatory phase, in 1993, the prime minister of Vietnam enacted Directive 73-TTg that required "sectors and regions while planning for development projects to present an environmental impact assessment report in its technical and economic feasibility study report" (Directive 73-TTg dated 25/02/1993, point 6). This is the first Vietnamese regulation that legally required an EIA to be conducted for development activities (Can 1994; Doberstein 2003; Sang 1997).

4.2.2. The legalisation phase 1993–2005

Fundamentally, the legalisation phase marked a number of important milestones for the EIA system in Vietnam. The most significant changes included the introduction of Vietnam's first LEP 1993 and the establishment of MONRE. After a decade of the preparation phase, EIA was officially regulated in Vietnam by the promulgation of the LEP 1993, following the decree 175/CP in 1994 detailing the implementation of the LEP 1993 including EIA. This initial EIA legislation was argued to be too ambitious, requiring both proposed and post-construction projects to prepare and submit EIS reports for appraisal (Box 4.1).

Box 4.1 EIA regulations in the Law on Environmental Protection 29-L/CTN dated 27/12/1993

Article 17. Economic, scientific-technical, socio-cultural, security-defence units and projects which have existed before the issue of this law must prepare environmental impact statements of their units, projects to the State government of environmental protection for appraisal.

In case of failure to meet environmental standards, the organisations of individuals concerned must take remedial measures within a given period of time as stipulated by the State management agency for environmental protection. Upon expiry of the stipulated time limit, if they still fail to meet the requirements of the State management agency for environmental protection, the latter shall report to the higher State authority at the next level to consider and decide on the suspension of operation or other penalising measures.

Article 18. Organisations and individuals planning to construct, upgrade their investment projects are required to prepare their environmental impact statement for the proposal and submit it to the State government of environmental protection for appraisal.

The result of consideration will be one of the bases for project appraisal.

Source: Vietnam National Assembly (1993)

The years 1993–2005 should be considered as the legalisation phase for two main reasons. First, EIA was legally required for major projects and regulated by Vietnam's LEP. Second, the governance structure for EIA implementation was also formulated. A number of legal documents were enacted guiding the implementation of EIA system. These documents included:

- Circular 1420-TT/MTg for current operating projects;
- Circular 715/MTg guiding the preparation and appraisal of environmental impact statement for FDI projects;
- Circular 276-TT/MTg guiding the implementation of pollution monitoring for post-EIA;
- Circular 1100-TT/MTg and circular 490/1998/TT-BKHCNMT guiding the preparation and appraisal of environmental impact statement for development projects.

There are significant differences between circular number 1100-TT/MTg and 490/1998/TT-BKHCNMT even though they were promulgated consecutively. Circular 1100-TT-MTg classified major development projects into three different categories (See Table 4.2). For the projects that were required to conduct an EIA, an initial environmental examination report is a basis for selection of alternatives and investment approval. One year after the enactment of Circular 1100-TT-MTg, this regulation was eliminated by Circular 490/1998/TT-BKHCNMT. After the release of Circular 490/1998/TT-BKHCNMT, EIA in Vietnam was normally conducted after an investment license was granted. This meant that the location, scale and technical design for a project were fixed.

Table 4.2 EIA regulation in circular 1100-TT/MTg and 490/1998/TT-BKHCNMT

	Circular 1100-TT/MTg			Circular 490/1998/TT-BKHCNMT	
Phase	Category 1	Category 2	Category 3	Category 1	Category 2
Investment licence	EIA is not required yet need to provide the information of main factors that may have negative environmental impacts in the application form for investment licencing	The pre-feasibility study report for investment appraisal need to contain a chapter that briefly defines the main factors that may cause negative environmental impacts	Need to submit IEE report together with pre-feasibility study report. IEE is one of the bases for investment approval and also is an evidence to consider whether full EIA is exonerative	A chapter briefly define main factors that may have negative environmental impacts need to be added in the application form for investment licencing	Proponents are required to submit an environmental standards registration papers to the state agency for environment protection
Construction		Need to prepare EIS	Need to prepare EIS	Need to prepare EIS	
Post-construction		Monitoring waste treatment facilities	Monitoring waste treatment facilities	Monitoring waste treatment facilities	

During this legalisation phase, in 2002, MONRE was established. It combined several departments from the former Ministry of Science, Technology and Environment. The creation of MONRE highlighted the importance of the EIA system in Vietnam. MONRE was crucial in ensuring that EIA could be delivered more effectively. During this period, EIA was authorised, managed and appraised centrally by MONRE and provincially by DONRE.

Between 1993 and 2005, because of the ambitious objectives to require EIA not only for proposed projects but also for post-construction units, a huge number of EISs were carried out. To be more specific, 5,818 EISs were appraised during this period, including 4,088 EISs for projects that had already been constructed, and 1,730 EISs for planned developments. Of these, 800 EISs were submitted to the central environment agency (Toan 2015). In addition, according to Toan (2015), 26,000 EISs and environmental standards registration papers were appraised and approved at the provincial level. Consequently, despite being praised as a milestone legislation when the LEP 1993 was introduced, subsequent analyses and its practical performances identified a number of significant limitations (Clausen et al. 2011). These shortcomings included inadequate coverage of impacts and lack of environmental baseline data; inadequate methods used for impact assessment; virtually non-existent treatment of environmental management issues; lack of transparency for EIA review and appraisal; inadequate involvement of stakeholders; lack of technical guidance for proponents; and lack of enforcement and monitoring of EIA compliance.

A major revision of the LEP 1993 was undertaken in the early 2000s. The process was led by MONRE with support from the United Nations Development Program (UNDP) and a number of international donors such as the World Bank, Asian Development Bank, and JICA. Some significant changes to the structure and content of the LEP 1993 were promulgated in the LEP 2005 which led to comprehensive changes in the ways EIA was implemented (Clausen et al. 2011). These changes are taken up in the following section.

4.2.3. The renovation phase from 2005-2014

Generally speaking, the most significant changes to Vietnam's EIA system in this phase focused on the decentralisation of the organisational and implementational structure for EIA in Vietnam promulgated by the LEP 2014. This period of time also saw the introduction of strategic environmental assessment as a key supportive instrument for the national and sectoral plan, policy and program.

After the enactment of the LEP 2005, significant changes were made to Vietnam's EIA system, in terms of reforms in the organisational and operational structure of the system. Box 4.2 provides a summary of the key amendments to LEP 2005.

Box 4.2 EIA regulation in the LEP 2005

Article 14. Objects for which strategic environmental assessment reports must be formulated

1. Strategies, master plans or plans for national socio-economic development.
2. Strategies, master plans or plans for nationwide development of industries and sectors.
3. Strategies, master plans or plans for socio-economic development of provinces and cities under central authority (hereinafter referred to as provincial level) or of regions.
4. Zoning for land use, forest protection and development; and for exploitation and utilisation of other natural resources on an inter-provincial or inter-industry basis.

5. Planning for development of key economic zones.

6. General planning for inter-provincial river catchment areas.

Article 17. Appraisal of strategic environmental assessment reports

(clauses 1 – 5 to be skipped)

6. The results of appraisal of a strategic environmental assessment report shall be one of the grounds for approval of the project.

7. The responsibility to organise an appraisal council for a strategic environmental assessment report shall be regulated as follows:

(a) MONRE shall establish appraisal councils for SEA reports development strategies and plans approved by the National Assembly, the Government or the Prime Minister of the Government;

(b) Ministries, ministerial equivalent bodies shall establish appraisal councils for SEA reports of development strategies, plans under their investment decision;

(c) Provincial people's committees shall establish appraisal councils for SEA reports of projects under their investment authority, and projects under the authority of the people's council of the same level.

Article 18. Objects for which environmental impact assessment reports must be prepared.

1. Owners of the following projects must prepare an environmental impact assessment report:

(a) National important projects;

(b) Projects using part of the land of or causing an adverse impact on a natural conservation zone, national park, historical and cultural site, natural heritage or beauty spot which is classified;

(c) Projects with a potentially adverse impact on a river watercourse, coastal area or area containing a protected ecosystem;

(d) Projects for construction of infrastructure of an industrial zone, high-tech zone, industrial group, export processing zone or handicraft village group;

(dd) Projects for construction of a new urban zone or concentrated residential area;

(e) Projects for exploitation and utilisation of groundwater or natural resources on a large scale;

(g) Other projects with a potential risk of causing an adverse impact on the environment.

Article 21. Appraisal of environmental impact assessment reports

(clauses 1 – 6 to be skipped)

7. Responsibility to organise the appraisal of environmental impact assessment reports in respect of projects shall be regulated as follows:

(a) MONRE shall establish appraisal councils or select services organisations for EIS appraisal for projects investment granted by the National Assembly, the Government or the Prime Minister of the Government; and inter-industry or inter-provincial projects;

(b) Ministries, ministerial equivalent bodies shall establish appraisal councils or select services organizations for EIS appraisal of projects under their investment authority, excluding inter-industry or inter-provincial projects;

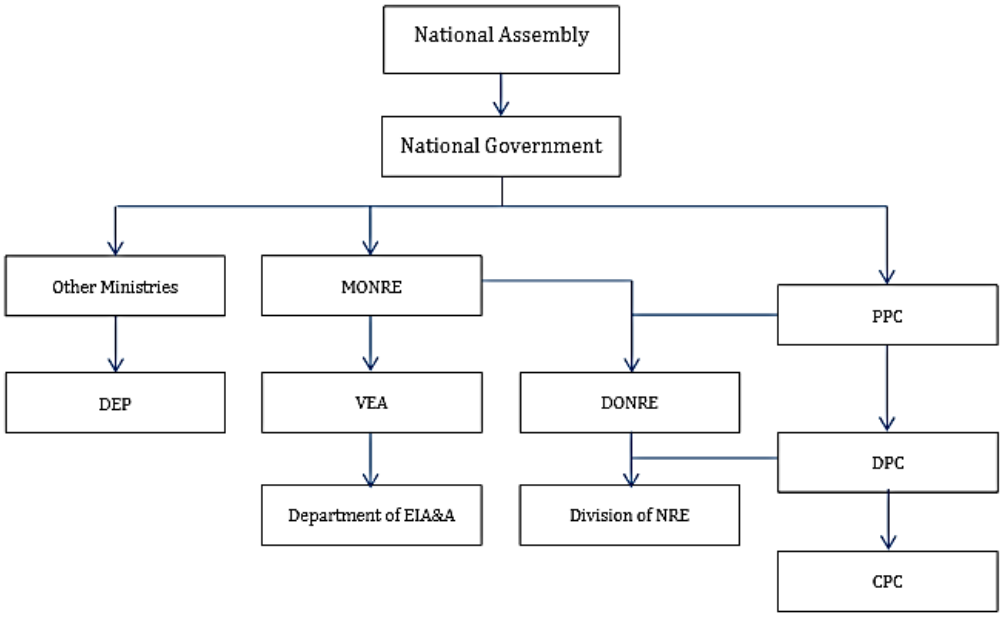
(c) Provincial people's committees shall establish appraisal councils or select services organisations for EIS appraisal of projects located in their province and under their investment authority, and projects under the authority of the people's council of the same level.

Source: Vietnam National Assembly (2005)

In the LEP 2005, Strategic Environmental Assessment (SEA) was legally required to forecast the potential adverse impacts of development strategies and plans at national, regional and sectoral levels. This is an important feature for environmental management within the country while considering cumulative environmental impacts and resilience capacity of the environment long-term. Post-EIA activities were officially adopted in LEP 2005 followed by decrees 80/2006/ND-CP and 81/2006/ND-CP promulgated in 2006. Based on this legislation sanctions for environmental violations were also applied. However, these post-EIA activities mainly focus on waste treatment facilities rather than "non-construction" mitigation measures. Major changes in this period mainly focused on enhancing screening lists identified in decree 80/2006/ND-CP, 21/1008/ND-CP and 29/2011/ND-CP.

The time for conducting EIA in the project cycle, even though not regulated in the law, is regulated in the decree 29/2011/ND-CP "an environmental impact statement shall be made concurrently with the formulation of the investment project or the preparation of feasibility study report" and approval of EIS is the grounds for the decision making process of project investment.

Figure 4.2 The EIA decentralisation in Vietnam



MONRE: Ministry of Natural Resources and Environment
VEA: Vietnam Environment Administration
EIA&A: Environmental Impact Assessment and Appraisal
DEP: Department of Environmental Protection
NRE: Natural Resources and Environment
PPC: Provincial People's Committee
DPC: District People's Committee
CPC: Commune People's Committee

The most significant change in this phase compared with the previous one was the socialisation of environmental protection that significantly reformed the implementation structure of Vietnam's EIA system. In other words, environmental management and protection has become the common mission of all governmental bodies in Vietnam. As a result, at the central level, many, if not all, Ministries

establish their own environmental agencies which were in charge of environmental aspects of their sector, including EIA. Detailed information about this is illustrated in Figure 4.2.

During the period 2011–2014, MONRE appraised and approved approximately 1,205 EISs and 100 SEA reports. In addition, 95 EISs and 12 SEA reports were appraised and approved by other ministries. At the provincial level, in 57 provinces, 5,623 EISs and 1,960 EPP reports were appraised and approved by DONRE (Toan 2015). The number of reports varies across these provinces (see Table 4.3).

In practice, EIA in Vietnam prior to 2011-2014 mainly focused on the preparation and appraisal of EISs. EIA was normally conducted after investment licences were approved. This meant that location, scale and technical design were mostly defined.

Table 4.3 Summary of the implementation of EIA system in Vietnam in 2011-2014 (source:Toan 2015)

	MONRE	Other Ministries	DONRE
EIS received	1,252	112	6,525
EIS approved	1,205	94	5,623
SEA reports received	100	12	10
SEA reports approved	71	1	9
Post-EIA reports received	352	1	1,712
Post-EIA approved	300	1	1,146
EPP reports received	145	31	36,101
EPP reports approved	142	28	1,932

During this renovation phase, the implementation of EIA in practice experienced a number of shortcomings (Clausen et al. 2011; Kinh 2015; PanNature 2009; Toan 2015)

- Environmental authorities had insufficient capacity to enforce implementation and penalties were too low.
- EIA is acknowledged as a “barrier” rather than a supporting instrument.
- EIA is carried out too late in the project cycle.
- EIA hardly influences the choice of alternatives; it mainly focuses on mitigation methods.
- The quality of EIA reports is poor (20-30% have one or some parts copied and pasted from guidelines or other reports); most reports mechanically follow the guideline; lack of sufficient technical method on evaluating the impacts.

- Public involvement is limited: conducted with "representatives" of people's committees and civil organisations. Local residents likely to be affected are not really engaged.
- Lack of sufficiently qualified EIA practitioners for the system.
- Financial resource spending for EIA is insufficient to achieve substantive outcomes.
- There are conflicts of interest between economic development and environmental protection.
- Experts serving on appraisal committees often have formal or informal links to the organisations and individuals responsible for preparing the EIA.
- Post-EIA activity is rarely conducted in practice.

4.2.4. Implementation phase from 2014–present

The LEP 2014 was formulated in order to eliminate the shortcomings of environmental management in Vietnam, including EIA. Compared with the renovation phase of 2005–2014, the organisational and implementational structure of EIA under LEP 2014 has remained. Changes in the law mainly focused on improving EIA practice. Some notable improvements were enacted:

- The timing of EIA in the project cycle;
- Enhancing the quality of EIA practitioners; and
- Public consultation.

For more details, under LEP 2014, EIAs are required to be conducted in the preparatory stage of the project cycle and appraisal of the EIS serves as the ground for the investment decision making process (see Box 4.3).

Second, regarding public consultation, in the past, proponents were only required to send their EIS summary report to the local commune people's committee and commune's fatherland front committee. These organisations are given 15 days to respond; otherwise it is considered that communities agree with the proposal. However, under LEP 2014, proponents are required to organise consultation meetings with representatives directly affected by the proposal.

Finally, under LEP 2014, decree 18/2015/ND-CP requires all EIA practitioners to acquire a certificate in EIA consultancy as a primary condition for working in the field. This is expected to enhance the quality of human resources for EIA.

Box 4.3 EIA regulation in the LEP 2014

Article 18. Environmental impact assessment objects

1. Environmental impact assessment objects consist of:

a) Projects subject to the decision on investment intentions made by the National Assembly, Government and the Prime Minister;

b) Projects that use land parcels situated in wildlife sanctuaries, national parks, historical – cultural monuments, world heritage sites, biosphere reserves, scenic beauty areas that have been ranked;

c) Projects that can cause bad effects on the environment.

2. List of projects mentioned at Points b and c Clause 1 of this Article shall be regulated by the Government.

Article 19. Conducting environment impact assessment

1. Owners of projects regulated in Clause 1 Article 18 of this Law shall carry out, on their own, or hire an advisory organisation to conduct environmental impact assessment and take statutory responsibility for the conclusive results after carrying out such assessment.

2. The environment impact assessment must be performed in the preparatory stage of the project.

3. The conclusive result yielded after carrying out the environment impact assessment shall be expressed in the form of the report on environmental impact assessment.

4. Expenses incurred from the formulation and inspection of the report on environmental impact assessment, and included in the total investment budget shall be covered by the project owner.

Article 25. Approval of the report on the environmental impact assessment

2. Decision on verifying the report on environmental impact assessment shall serve as the grounds for the competent authority's following tasks:

a) Decision on the intention to invest in the projects specified in Article 18 of this Law must be granted if the project is required to obtain such decision in accordance with laws.

b) Issuing and revising the prospecting permit, mineral extraction permit in respect of the mineral exploration and extraction projects;

c) Approving the plan for prospecting or exploration, and the plan for mine development in respect of petroleum exploration and extraction;

d) Issue and revising the construction permit in respect of the projects on the development of works or structures that are required to obtain the construction permit before commencement;

dd) Issuing the investment certificate with reference to projects that are not regulated at Points a, b, c and d in this Clause.

Source: Vietnam National Assembly (2014a)

In practice, according to Toan (2015), currently, MONRE has about 100 officers who work directly on EIA, as well as approximately 50 officers in other ministries. Among the 63 environmental agencies at the provincial level, 1,126 staff members work at DONRE. Of these, around 323 officers work directly on EIA. It is reasonable to therefore conclude that currently, Vietnam has a relatively complete structural system for EIA with a large number of staff and environmental protection agencies from the central to the local level. This will provide a good base for the country to enhance its practical performance of EIA in the future.

4.3. Conclusion

In conclusion, EIA has been practiced in Vietnam as the primary environmental management instrument since 1993. Since that time the system has undergone considerable evaluation and change has been implemented over four phases. The most remarkable changes were enhancing the implementation and organisational structure during the second phase and during the third phase when MONRE was established and took responsibility for environmental protection activities within the country including the EIA system.

Since 2014 the focus has been on enhancing EIA performance in practice. A large volume of major development proposals are assessed each year and so this process of evaluation and amendment has been critical. Currently, it is reasonable to state that Vietnam's EIA system is relatively well designed and it has all of the main elements required of an effective EIA system such as: screening, scoping, alternative's selection, EIS preparation, EIS review and appraisal process, public consultation, post-EIA evaluation and SEA.

An appraisal of the effectiveness of the practical performance of EIA in Vietnam based on the perspectives of stakeholders engaged in the process will be provided in the next chapter.

CHAPTER 5. STAKEHOLDER PERCEPTIONS ABOUT THE EFFECTIVENESS OF EIA SYSTEM IN VIETNAM

This chapter presents the findings from the study undertaken in Vietnam in March and April 2016 and provides respondent's perceptions of various aspects of the EIA process in Vietnam from the legal framework to monitoring and auditing.

5.1. Legal provision

Respondents were asked to share their opinions about the effectiveness of EIA legislation in Vietnam. According to the result of the interviews, most of the respondents talked positively about the legal framework of Vietnam's EIA system following the 23 years since the first time this instrument has been practiced in the country. More details can be seen in the Figure 5.1 below.

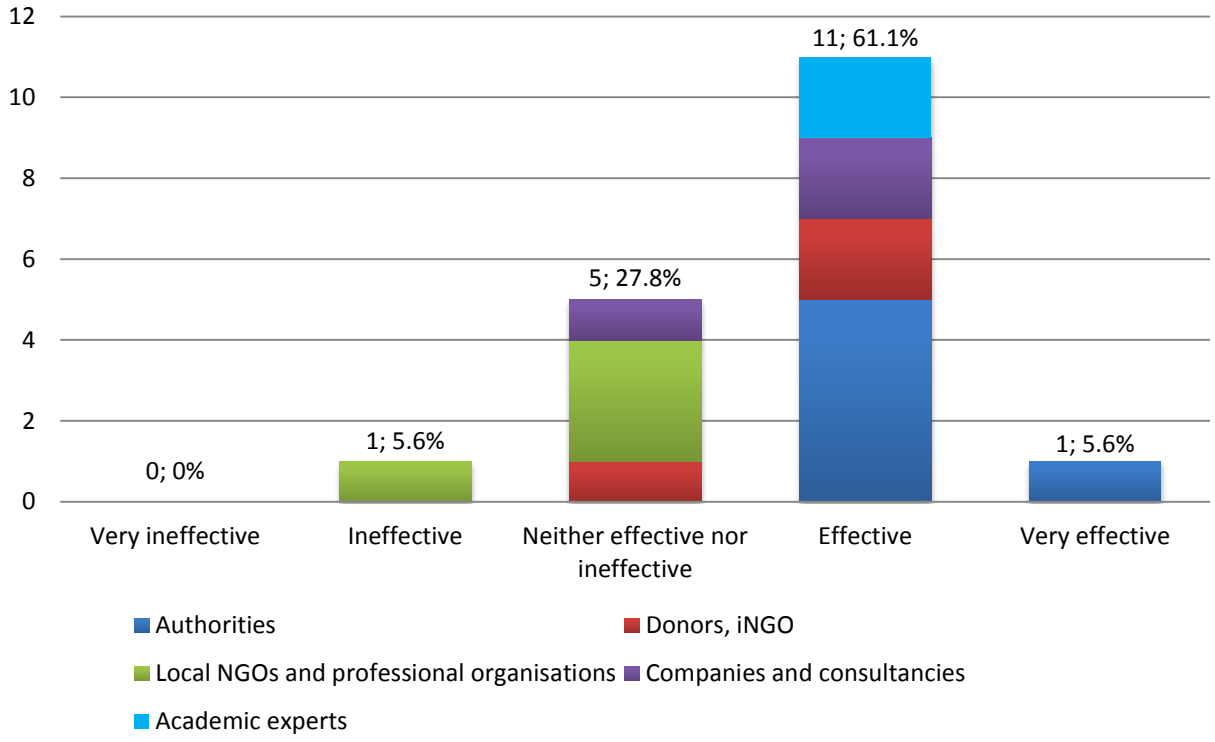


Figure 5.1 The effectiveness of Vietnam's EIA legislation

To be more specific, almost 70% of respondents (n=12) thought that the legal provisions of the EIA system in Vietnam are positive. Over half of the positive comments concluded that the legal framework of Vietnam's EIA system is proficient mainly because it has undergone development over a long period of time with numerous improvements being made. For instance, one participant stated that "*after 23 years of development, legal background and implementation structure for EIA system in Vietnam has been reviewed and improved continuously in the LEP 2005, 2014 and numerous bylaw documents that have been sourced from the country's practical experience in environmental protection, so it must be better*" (038, academic expert).

Interestingly, however, interviewees shared their opinions that despite Vietnam's EIA system being continuously improved, there are still gaps between the theoretical concepts of EIA legislation and how it is implemented in practice because "*normally, there will be something arise in practice that we could not predict in the legal formulation process*" (003, authorities). According to respondents, there are a number of issues hindering the effectiveness of the legislative provisions and administrative set up of EIA in Vietnam.

Firstly, respondents shared their concern about the lack of sufficient environmental and technical background data in Vietnam during the legal formulation process. Accordingly, the country's EIA legislation was formulated based mainly on the practical experience of other EIA systems such as those in the U.S, Canada, Philippines and China without reflecting much on the country's specific conditions. For instance,

> *Our EIA system has been put in the LEP 1993 mainly because of the international practice. There was evidence that other countries could implement the instrument well, so is applicable to Vietnam.* (026, local NGOs and professional organisations)

Another problem to be considered is the inappropriate decentralisation of the environmental management system in Vietnam as defined by the LEP 2005 and LEP 2014, leading to conflicts of interest among environmental protection agencies and conflicts between LEP 2014 with other legislation frameworks, for instance, the Law of Investment 2014. This decentralisation presented some obstacles that limit the independence of appraisal agencies and impact significantly on the overall effectiveness of Vietnam's EIA system because *"no one cancels their own projects due to environmental concerns raised by EIA"* (022, local NGOs and professional organisations).

5.2. Selection of alternatives

Selection of alternatives is not a legal requirement by any of the EIA regulations in Vietnam. Consideration of alternatives, therefore, depends on the willingness of proponents and capacities of consultants who conduct EIA.

Some respondents (22%, n =4) believe that consideration of alternatives is undertaken proficiently because "*during the appraisal process, we will ask proponents to carry out their alternatives mitigation measures, if these are not sufficient, they will have to improve*" (009, authorities).

However, as can be seen in the Figure 5.2, the perspectives of most interviewees about the consideration of alternatives in the EIA system in Vietnam are slightly negative.

Among the 18 respondents who have gave their opinions about this, 44.5% (n=8) argue that consideration of alternatives for projects is hardly influenced by EIA. Six individuals (33.3%) responded that it was neither effective nor ineffective.

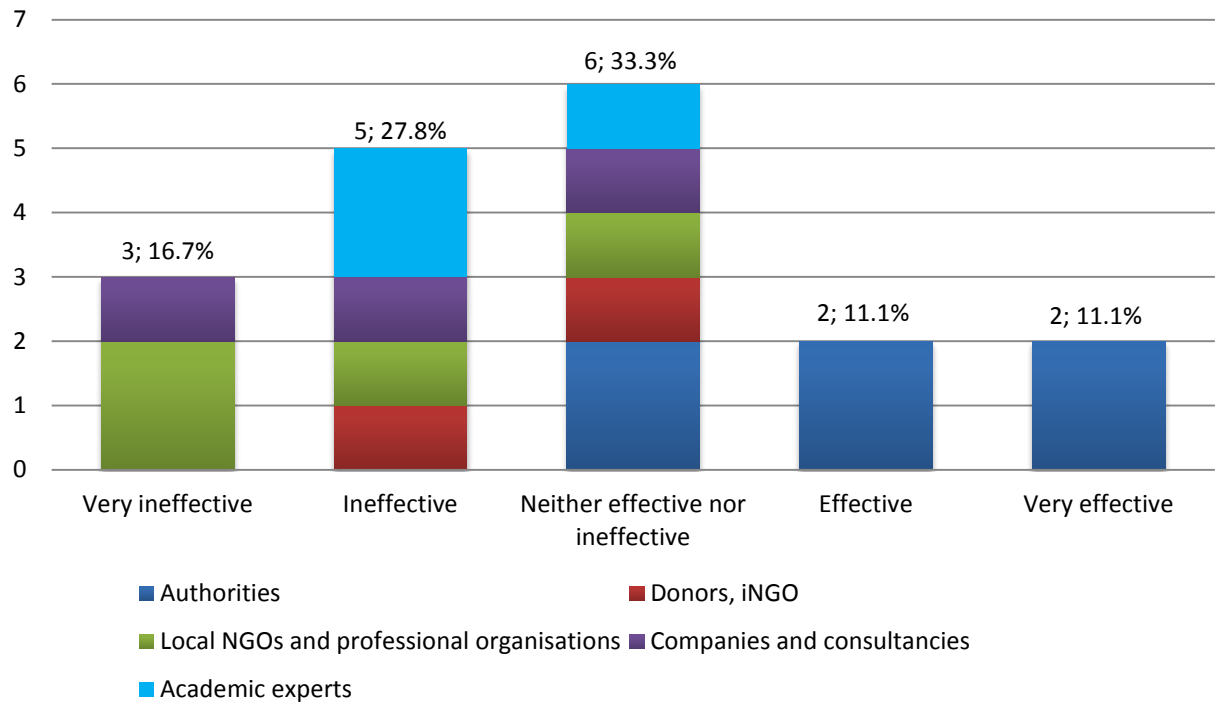


Figure 5.2 The effectiveness of alternatives selection

Of these respondents, 12 individuals shared their common opinions that EIA is usually conducted too late in the project cycle when the project's location, scale and technical designs are already clearly defined. This is one of the consequences of the inadequate weight given for environmental aspects in the decision making process and the conflict between LEP 2014 and LOI 2014. For instance, participants 002 and 004 from the authorities group shared their opinion:

> *Alternative selection is a formality because the investment licence of the project was granted for specific locations, scales and technical designs, so EIA is conducted as a requirement that the proponent needs to consider mitigation measures for environmental impacts, not for the considerations of alternative selections.* (030, companies and consultancies)

> *Alternatives consideration for technical design, for instance, is not the requirement of EIA. It is considered in the technical evaluation of the Ministry of Science and Technology or the department of science and technology at the provincial level. Therefore, selecting the technical design in EIA is difficult because EIA is conducted quite late with technology selection. Honestly, the influence of alternative selection on EIA is not significant as we will prioritise more for economic factors*. (002, authorities)

Despite the fact that the LEP 2014 aims to improve the problems by requiring developers to conduct EIA earlier in the preparation phase of a project concept note and approval of EISs should serve as the grounds for the competent authority's subsequent tasks, however, at the time of conducting this research project, the problems do not seem to have improved.

I do think that EIA is a supportive tool to select a project location that minimises environmental impacts. However, currently in Vietnam, the time EIA is to be delivered is ambiguous. Prior to 2014, EIA was usually conducted after the investment license was granted. Some proponents conducted EIA after the approval of their construction permit, or even when their factory has been operating. So the selection of alternatives for locations was rarely taken into account. At the moment, regulations seem to be clearer while EIA approval is a need for investment license; however, its performance in practice is a different story. As I mentioned before, it is very hard to change the anticipated location of a project because of EIA. (022, local NGOs and professional organisations)

5.3. Screening of actions

Screening of actions for EIA in Vietnam is legislated in its law and bylaw regulations because it was a government priority to reduce the time spent on EIA procedures. This will enable proponents to quickly determine whether or not EIA is required for their project just by referring to the legal documentation.

In terms of stakeholder perspectives in this study, there were 17 out of 20 responses to the question about the effectiveness of screening of actions for Vietnam's EIA system (Figure 5.3).

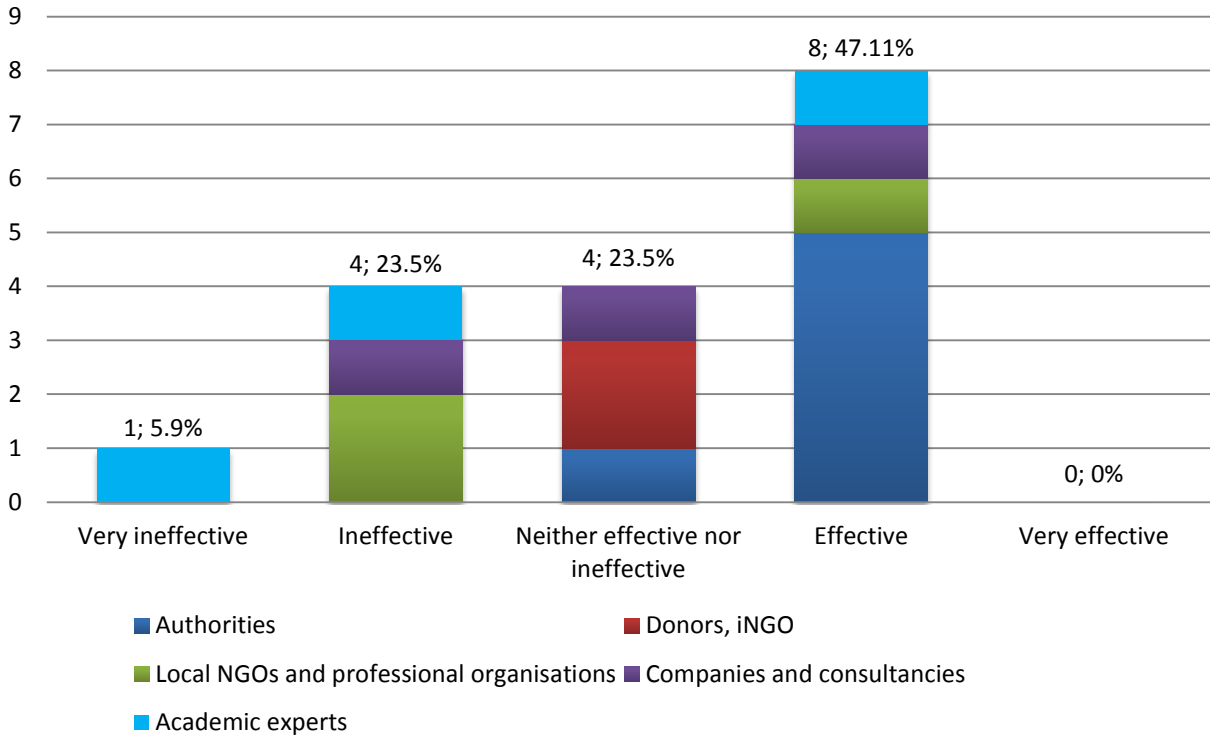


Figure 5.3 The effectiveness of screening activities

Figure 5.3 shows that, almost half of the interviewees (47%, n=8) believe that screening by law works positively in the socio-economic and environmental conditions of Vietnam. Of these, governmental

officers seem to hold more positive views about screening in EIA with five individuals (83% of the group) talking positively about this element.

Overall, respondents felt that the biggest advantage of the screening bylaw (prescribed screening) is the simplification of administrative procedures in the decision making process for new projects. A number of respondents believed that the screening by law has reduced the time for the overall EIA process and enhanced cost-effectiveness.

> *Instead of spending a lot of time on the consideration of requiring EIA for a project or not, we just need to refer to the regulations. The economic benefit is visible. (005, authorities)*

> *After the opening period of the economy, Vietnam needs to ease its investment procedure and reduce the time for investment licenses. Therefore, it will be time consuming to conduct ad hoc screening for proposed projects. This is the reason why Vietnam established a specific list of projects that require conducting EIA in its law*. (02, local NGOs and professional organisations)

Secondly, prescriptive screening may avoid corruption and therefore avoid skipping projects that may have significant impacts on the environment. This is because:

> *In our country, legal compliance is not as high as in developed countries, so we need to consider our own situation and avoid corruption by fixing the screening of actions with a list in our law and decrees*. (004, authorities)

Despite the advantages of prescriptive screening, respondents raise a number of issues that need to be tackled in order to improve the effectiveness of screening of actions. There were 28% (n=5) of those interviewed who talked negatively about this way of screening and 23% (n=4) were hesitant regarding its effectiveness.

> *The process of creating this list is discretionary, there is a lack of sufficient scientific data and especially a lack of sufficient experience of data about the impacts of equivalent projects. I don't contend that the list will work proficiently or not, but from the law making aspects, the method of making this list is not reliable.* (024, local NGOs and professional organisations)

As a consequence, the screening of impacts in Vietnam considers the potential impacts of a project based on its scale and technical forms, rather than considering *ad hoc* projects in a particular location. The project list is also argued to be inflexible and to consist of too many insignificant projects whilst leaving out several significant projects. In particular, prescribed screening is unable to manage cumulative impacts and unable to consider the resilience of the local environment. For example, *"EIA was triggered for a small temple of Buddhist monks who would like to live in seclusion only because it was located in the natural reserve area"* (030, academic experts). On the other hand, *"investors are very*

sharp and are able to prepare for law-evading. For example, if their project required an EIA and is sensitive, they will divide it into a number of smaller-scale projects that will not be triggered EIA, or triggered EIA at lower level" (020, donors and international NGOs).

> *If screening is effective, there would not be the case of abandoning and eliminating more than 400 small-scale hydropower plants from the national energy plan due to low economic benefit and significant environmental concerns.* (029, local NGOs and professional organisations)

5.4. Scoping of impacts

Scoping of impacts, similar to the selection of alternatives, is the responsibly of, and conducted by EIA consultants, not one of the requirements from environmental protection agencies. In most cases, scoping of impacts is reviewed by an appraisal committee. The committee may request a proponent to enhance the scope of their impact assessment. Interestingly, interviewees think quite positively about scoping activities within Vietnam's EIA system.

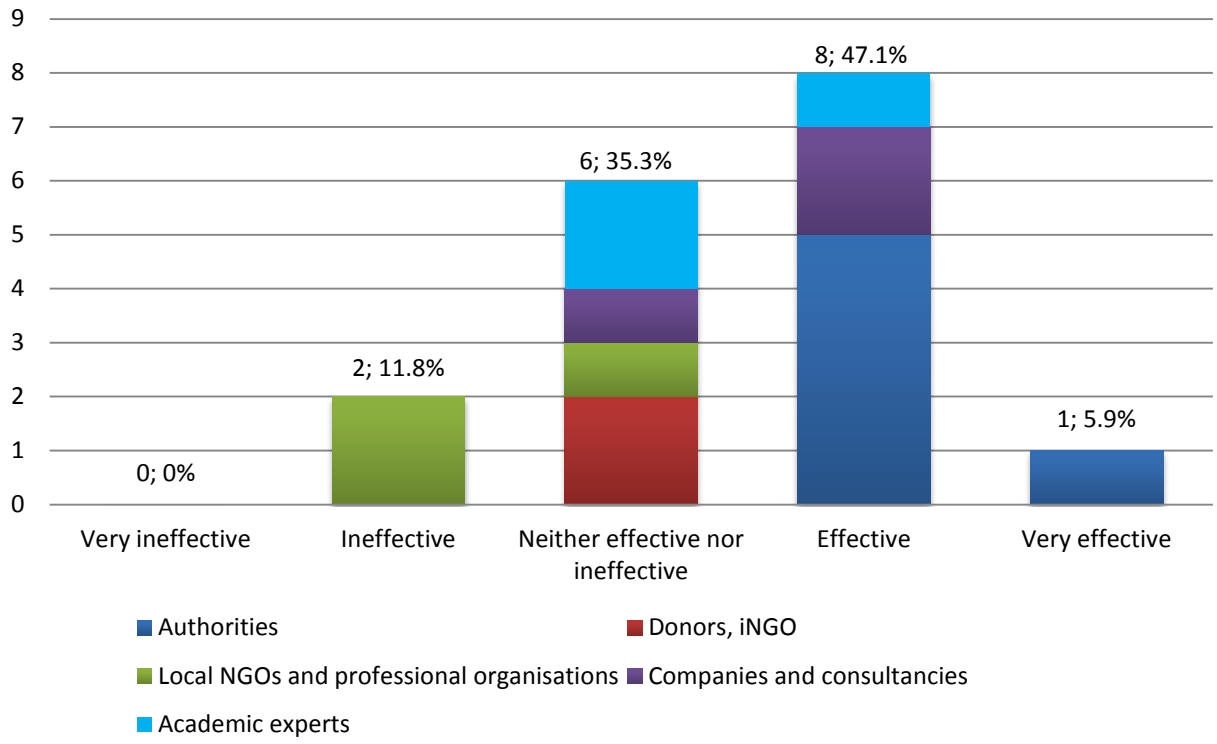


Figure 5.4 The effectiveness of scoping of impacts

Specifically, as illustrated in Figure 5.4, nine out of 17 (53%) respondents shared the viewpoint that scoping is conducted effectively or very effectively. There were different viewpoints among groups of EIA practitioners who participate directly in the system (authorities, consultancies, experts) and those who are not involved directly in the system (NGOs, donors) about the effectiveness of scoping. Only

two (11.7%) individuals, who belong to local NGOs and professional organisations, believe that scoping is ineffective.

For clarification, interviewees, who share positive opinions, believed that scoping of impacts is effective thanks to the revision and enhancement made during the appraisal process. According to respondent 011 from the authorities group,

> *We don't have any new forms of production or strange technology; most have been implemented in other countries, so we can learn from their experiences. Furthermore, EIS will be considered by a sufficient appraisal committee with rich experiences in the field, so they will give their comments to enhance the scope of impacts for proponents.* (011, authorities)

Despite holding positive viewpoints about the scoping of impacts, respondents still point out some of its limitations.

Firstly, because the classifying of impacts is not clearly defined by any legal document, it is the responsibility of proponents and their EIA consultants. Therefore, resources that proponents are willing to spend on their EIA, and their consultants' capacities, play an important role in the quality of scoping activities. Consequently, it is not possible to guarantee the quality of scoping activities.

> *Some EIA consultancies define their scope well thanks to their sufficient experience; however, some of them only copy from other's reports.* (042, academic experts)

> *EIA consultants acknowledge the scope of impacts well; the only thing is their willingness to do it well. They have to consider the cost, benefit and their available resources for EIA, which will influence the effectiveness of this instrument.* (020, local NGOs and professional organisation)

Additionally, again, because scoping of impacts is the responsibility of proponents and EIA consultants, technical guidelines will be the core elements that influence the effectiveness of scoping. However, a number of respondents complain that technical guidelines for conducting EIA including scoping of impacts are insufficient. Respondents claim that most of the guidelines focus on what contents should be included in the EIS and there is a lack of sufficient technical methods determining the scoping of impacts.

> *Scoping in our EIA system is weak because the technical guidelines are deficient. Most of them are guiding the content of the EIS, not guidelines for conducting EIA. As a result, EIA consultants are disorientated concerning where they should collect data and what scale to assess the impacts.* (026, local NGOs and professional organisations)

5.5. The quality of EIS

The perceptions of stakeholders about the quality of EISs are slightly inconsistent. Six out of 18 (33.3%) respondents responded positively while 22.2% (n=4) were negative about the effectiveness of EIS in supporting the decision making process. There are 27.8% (n=5) of interviewees with a neutral viewpoint. However, when looking at group perceptions, local NGOs and professional organisations have some different opinions compared with authorities, who still keep remarkably positive perspectives. Companies and consultancies, who directly conduct EIA and prepare the EIS also think positively about the quality of EIS in the decision making process.

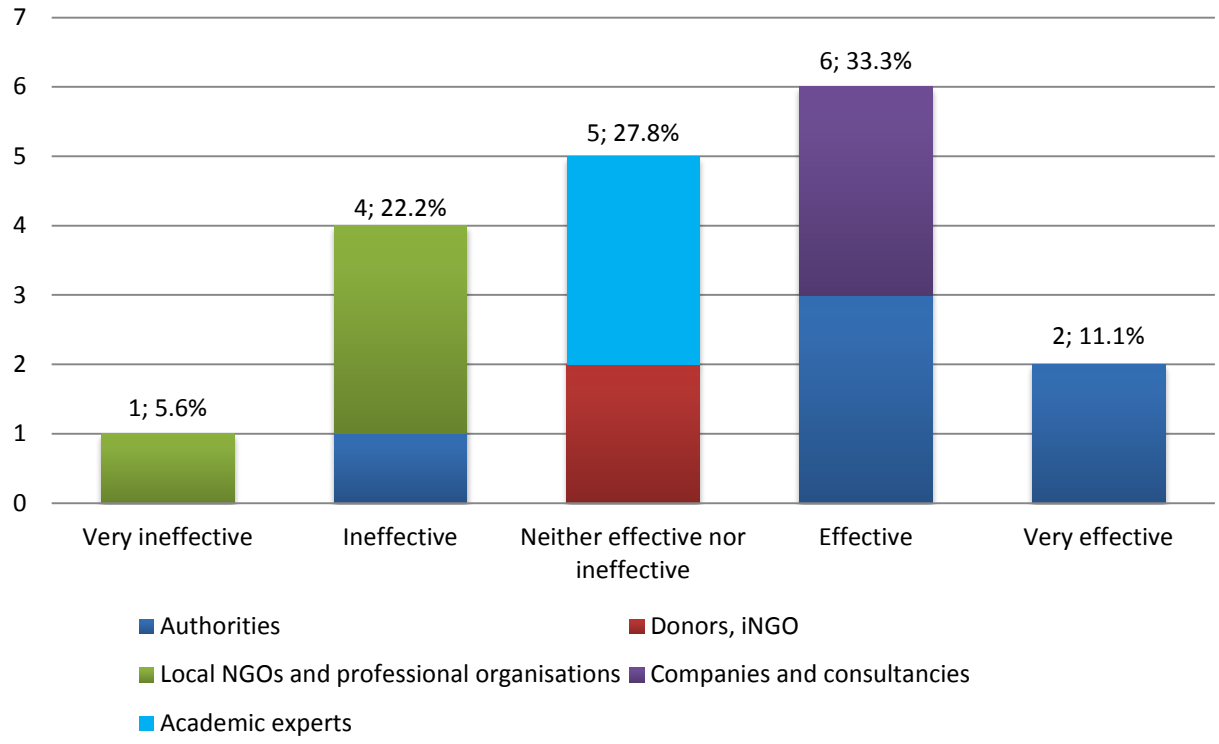


Figure 5.5 The effectiveness of EIS in supporting decision making

Of the respondents who think positively about the quality of EIS, they considered it is effective because it is the only instrument to manage the environmental aspects of development activities. Besides, EIS will go through a stringent appraisal process whereby any poor quality EIS are required to be improved before being accepted by the decision making authorities.

> *EIS indicated potential environmental negative impacts and possible mitigation measures. It has been appeared to be a sufficient management tool for environmental aspects of proposed project.* (009, authorities)

> *The nature of EIS is a commitment of proponents to environmental protection authorities. Therefore, it is the commitment of developers on what to do and how to do. Later on, it will serve as the base for monitoring and environmental protection.* (004, authorities)

In contrast, there are also a number of weaknesses with EIS reported by respondents; consequently, EIS are sometimes a formality. These shortcomings include:

- The actual role of EIS in the decision making process and transparency of that process;
- The conflict between investment attraction and environmental protection;
- Lack of background data;
- Lack of sufficient technical guideline;
- Lack of sufficient resources for EIA.

The key issue does not seem to lie on the quality of EIS; it lies on the influences on the decision making process from other factors. So the quality of EIS does not play any realistic roles. I'm not sure if the decision makers have considered them before deciding. (022, local NGOs and professional organisation)

May be my viewpoint is not so positive yet from the cases that I participated in, there was the fact that EIS are not yet a sufficient supportive instrument for the decision making process, it was no more than an administrative procedure that proponents need to go through before implementing their project. (029, local NGOs and professional organisation)

Technical methods applied for impact assessment vary among projects; some of them are very insufficient. For a hydropower project, for example, it is the common situation that the pollution load such as fumes, dust, noise, and vibration are predominant whereas hydrological and ecological issues are omitted. (040, companies and consultancies)

5.6. EIS appraisal process

Effectiveness of the EIS review process and the quality of EISs have an intimate interrelation, especially those within the EIA system in developing countries (Wood 2003a). Opinions of interviewees given for the effectiveness of EIS in supporting the decision making process and EIS review process are quite consistent.

Overall, interviewees from authorities are still likely to think more positively than any other respondent group. As can be seen in Figure 5.6, all of the respondents in this group believe that the process is either effective or very effective. All academic experts and interviewees from donors and international NGOs had neutral opinions on this feature.

It is widely accepted among interviewees that the key role of EIA in Vietnam is to propose mitigation measures for environmental impacts of proposed projects while decisions on whether the project will be approved to be implemented or not, will be given by the investment management agencies. Therefore, opinions of respondents focus on evaluating the effectiveness of the EIS review process within this function.

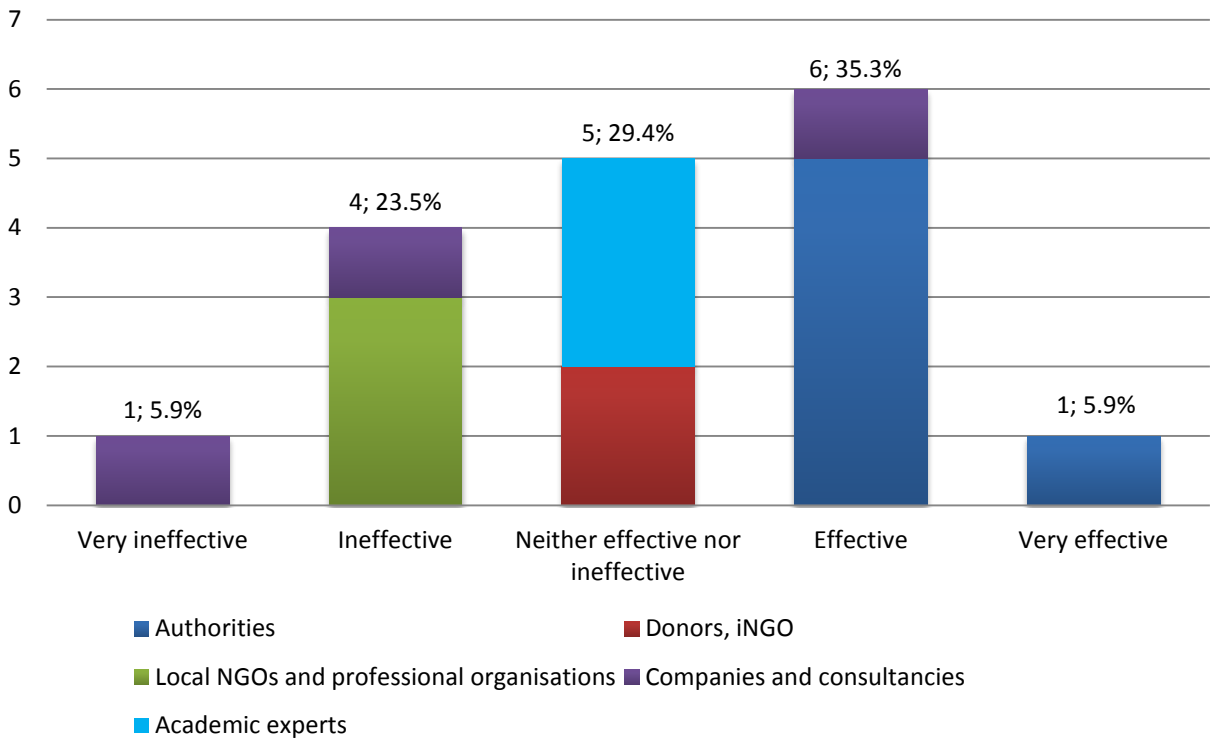


Figure 5.6 The effectiveness of EIS review process

Seven of the respondents (41%) argued that the EIS review process is effective; their common idea is that the process carries out good performance because it will urge proponents and EIA consultants to enhance their EIS before approval and submission for the final decision of the project.

> *From my point of view, it is effective as in case there are any poor EIS, we will give them the opportunity to supplement and amend. Even in some cases when the report is not approved by the appraisal committee, then they have to re-conduct the EIA and resubmit the EIS and need to do something to get approval for the project. Ultimately, we also need to consider the sustainability of the project.* (004, authorities)

> *The effectiveness of EIA review process manifested in the fact that there have some cases EIS are rejected, then proponents are required to supplement and amend to resubmit and get approval.* (009, authorities)

In contrast, five individuals (29%) think that the EIS appraisal process is either ineffective or very ineffective because of several shortcomings regarding the weight given to the quality of EIS in the decision making process and the independence of this process. These problems are also, to some extent, shared by five other individuals (29%) who believe that the process is neither effective nor ineffective.

First, because weight given to EIA in the decision making process is not adequate, EIS sometimes becomes a formality and it depends largely on the willingness of leaders in environmental protection.

Weight given to environmental aspects in the decision making process varies among sectors. Some sectors are doing it well, such as civil construction. Generally speaking, it depends on the awareness of the leaders and their willingness in environmental protection. Sometimes it even depends on the pressure from public opinions. (020, donors and international NGOs)

Another significant problem is the independence and transparency of the decision making process on EIS approval. EIS appraisal and decision making on projects is sometimes influenced by other factors such as political influence, economic and social factors and also corruption. Consequently, the quality of EIS seems not be the key factor for approval.

There are numerous reasons that stem from the unclear legal basis for appraisal criteria. Decisions made are dependent too much on the subjective opinion of decision makers. (026, local NGOs and professional organisation)

The transparency is very low. It is really hard to approach any EIS while public concerns are raised. For example, if I need to look up any reports, they are hardly ever available on the internet. When making requests from Ministries, they say that it is under the management of provincial authorities, while local agencies transfer the request to Ministries. However, for projects sponsored by international donors such as the World Bank, ADB, these reports are always available online. (029, local NGOs and professional organisations)

There are some EIS, which are classified in the A category of the World Bank, which have already been approved by a government agency yet are required to conduct EIA again while submitting to the World Bank because of the persuasiveness. (015, donors and international NGOs)

5.7. Appraisal committee

Being a part of the EIS review process, appraisal committees in Vietnam's EIA system play an important role in determining the quality of EISs and they give their critical opinions in order to improve EIS reports.

As can be seen in Figure 5.7, overall, respondents talk quite positively about the quality of appraisal committees. Nine out of 17 (53%) interviewees shared positive ideas about the effectiveness of the appraisal committees within their expected roles.

It is a good point allowing opportunities for scientists to raise their concerns about the projects. (022, local NGOs and professional organisations)

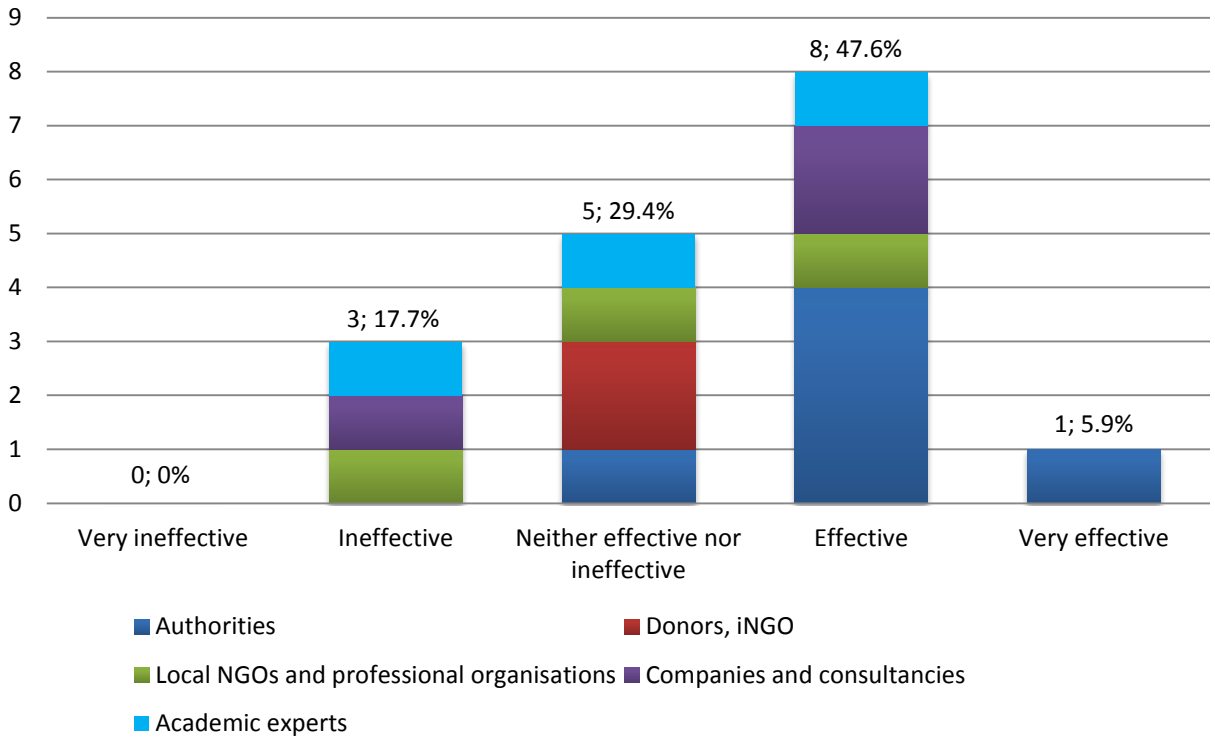


Figure 5.7 The effectiveness of appraisal committee

In contrast, three individuals (17.7%) argue that it is ineffective. According to these respondents, the role of the EIS appraisal committee in the decision making process is questionable. For example:

> *Appraisal committees do not play the key role in the decision making process of project approval, only for the approval of EIS. The decision makers for investment licenses rarely seek consultations from the appraisal committee for their decision. (042, academic experts)*

In addition respondents' opinions about the transparency of the process establishing appraisal committees are quite inconsistent. A number of individuals shared their positive viewpoints:

> *When establishing an appraisal committee, our first consideration is to select members that adequately represent management authorities in a related field. Secondly, the committee also includes independent experts who have sufficient experience of the field. Generally, these selections are flexible and depend on the characteristic of a particular project.* (002, authorities)

> *At the department of EIA&A, they have a list of specialists. Based on the characteristics of each project, they will select appropriate experts on the basis of balance between authorities and independent experts. They also have criteria for selecting experts relying on their expertise and years of experience.* (005, authorities)

Additionally, other respondents hold more pessimistic viewpoints about the effectiveness of the appraisal committees. They argue that in many cases, appraisal agencies will choose people who tend to support or have favourable comments about the project. Accordingly, these interviewees raised their concerns about the impartiality of the appraisal committees.

> *The selection processes of establishing appraisal committees are not transparent and have some shortcomings. They are likely to choose committee members who tend to support the project while specialists who have a strong stance will be left out. The overall goal is that the EIS needs to be approved.* (015, donors and international NGOs)

> *In some cases, it is the subjective opinion of the authority on selecting appraisal committee members, therefore they will pick those who tend to give support to the project. For instance, if they are considering EIS of a hydropower plant, they will select committee members who are in favour of hydro energy.* (022, local NGOs and professional organisations)

Another issue to note is the conflicts of interest within appraisal committees when its members may be seen to have a relationship with proponents in some way. In addition, highly qualified and experienced specialists may be the EIA consultants for some projects whereas many also participate in the appraisal committees for other projects. Their relationships with environmental protection agencies, therefore, are inevitable.

5.8. Post-EIA

Figure 5.8 demonstrates various stakeholders' perceptions regarding the effectiveness of post-EIA activities. Four out of 18 (22.2%) respondents share their positive viewpoints about this criterion whereas eight of them (44.4%) indicate negativity about the performance of these activities. Six individuals (33.3%) hold neutral perspectives.

Since the introduction of the LEP 2005 and LEP 2014, more attention has been paid to post-EIA activities. Some respondents had a positive opinion about the promising improvement of these activities toward a more effective EIA system, while a number of respondents doubt its substantive effectiveness in practice due to numerous obstacles.

Of the people who talk positively about this element, they believe that "*there are always gaps between the practices and what have been predicted in EIA. However, in fact, there are a number of proponents who recognise these gaps during the implementation phase and inform environmental protection agencies in a time manner*" (002, authorities).

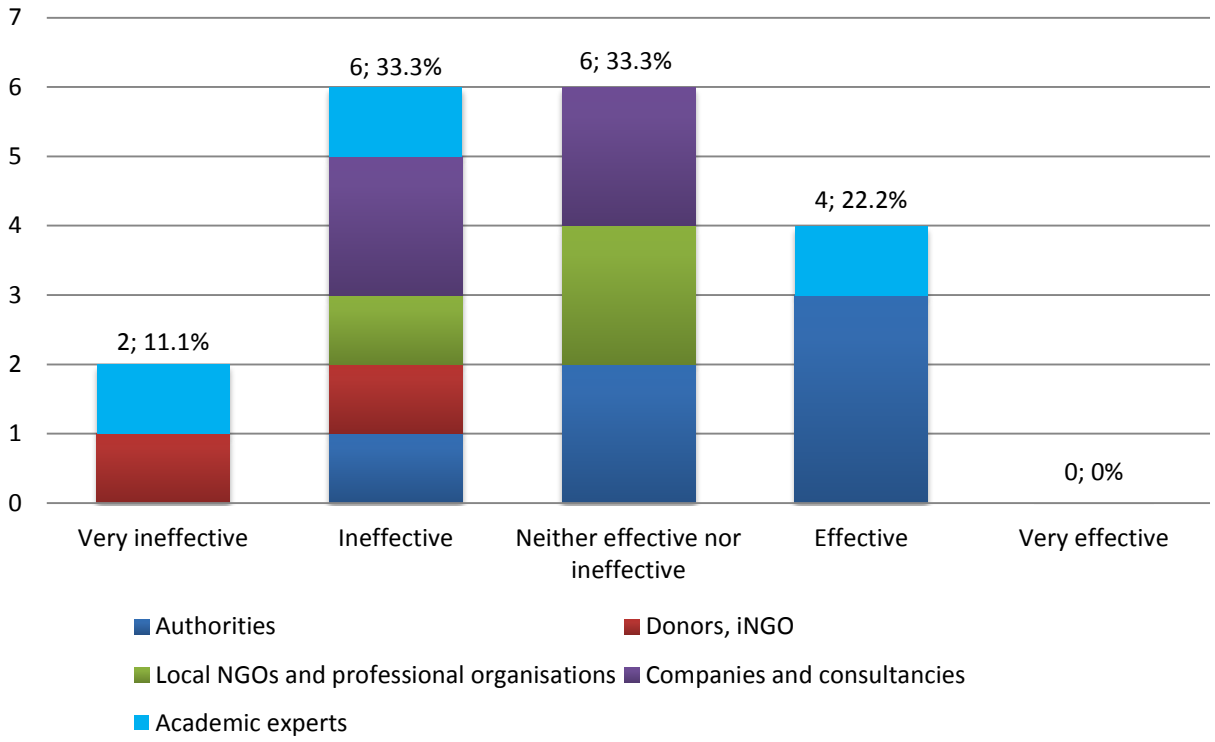


Figure 5.8 The effectiveness of post-EIA activities

However, within Vietnam's EIA legislation, EIA auditing and monitoring within EIA in Vietnam focusses mainly on waste treatment facilities and there is a lack of monitoring mitigation methods during construction phases or non-construction mitigation measures. Furthermore, post-EIA activities are rarely conducted due to the lack of human and financial resources.

According to respondents, there are a number of major obstacles regarding auditing and monitoring activities of EIA in Vietnam.

Firstly, is a lack of clear legislation and resources for post-EIA activities while the ultimate objectives of proponents for conducting EIA are the approval of EIS. As was mentioned before, auditing and monitoring which are promulgated in EIS legislation focus only on the approval of waste treatment facilities before the project is put in to operation. Interestingly during the construction phases, , the responsibilities for monitoring the compliance of mitigation measures will be taken by proponents and their construction contractors.

> *It is funny that proponents and their constructors are responsible for monitoring mitigation measures proposed in EIS. The monitoring from the MONRE or DONRE for small and medium scale projects are hardly ever and for significant projects are normally once in a year.* (015, donors and international NGOs)

> *Post-auditing and monitoring in our EIA system is predominantly on waste treatment rather than mitigation measures such as ecological conservation or salinisation prevention.*

Generally speaking, post-EIA activities are rarely conducted. (040, local NGOs and professional organisations)

Environmental protection agencies have inadequate resources to spend on monitoring and auditing for such a large number of projects. For example, they have to contract with an outsourcing agency to monitor the sewage characteristics of a factory. Proponents will be responsible for the payment of this contract, so the reliability of the result is questionable. (011, authorities)

Besides, some respondents also shared the opinion that the punishment for noncompliance is too low compared with the cost of spending for approved mitigation measures.

Some proponents prefer paying fines rather than implementing mitigation measures because punishments are insufficient. For instance, a paper production factory creates 30.000m^3 of sewage per day, the cost for treatment is around 0.5USD/m^3; so by skipping waste water treatment, they can "save" 15.000USD/day. As a result, they can avoid spending millions of USD per year whereas the maximum punishment for this violation is only 3.500USD. (030, companies and consultancies)

Finally, as mentioned before, the reports are not published, therefore the public and local community are unable to get involved in observation and supervision.

It is very difficult to make an approach to any project's site. For example, if we would like to access their areas, we need to inform them a month before with an official letter. However, when we arrive, they will not allow us access because their management board is not at the site at that time. (036, local NGOs and professional organisations)

5.9. Public consultation

As was mentioned in the current EIA procedure in Vietnam, public involvement is conducted when an EIS is finished. The proponents then need to publish their EIS to the public in the directly affected areas.

A number of respondents shared their opinions about the prospect of public involvement in the EIA system in Vietnam as this important feature has been legally required in the LEP 2005 and the government also spends great efforts to enhance the effectiveness of this instrument. Notwithstanding this there are still some shortcomings in the practical experience of public involvement.

According to Figure 5.9, a remarkable proportion of interviewees doubt the contribution of public involvement in Vietnam's EIA system. Almost half, nine out of 19 participants believe that its performance falls below expectation while only two of them had positive viewpoints; and eight individuals (42%) had neutral opinions on this issue.

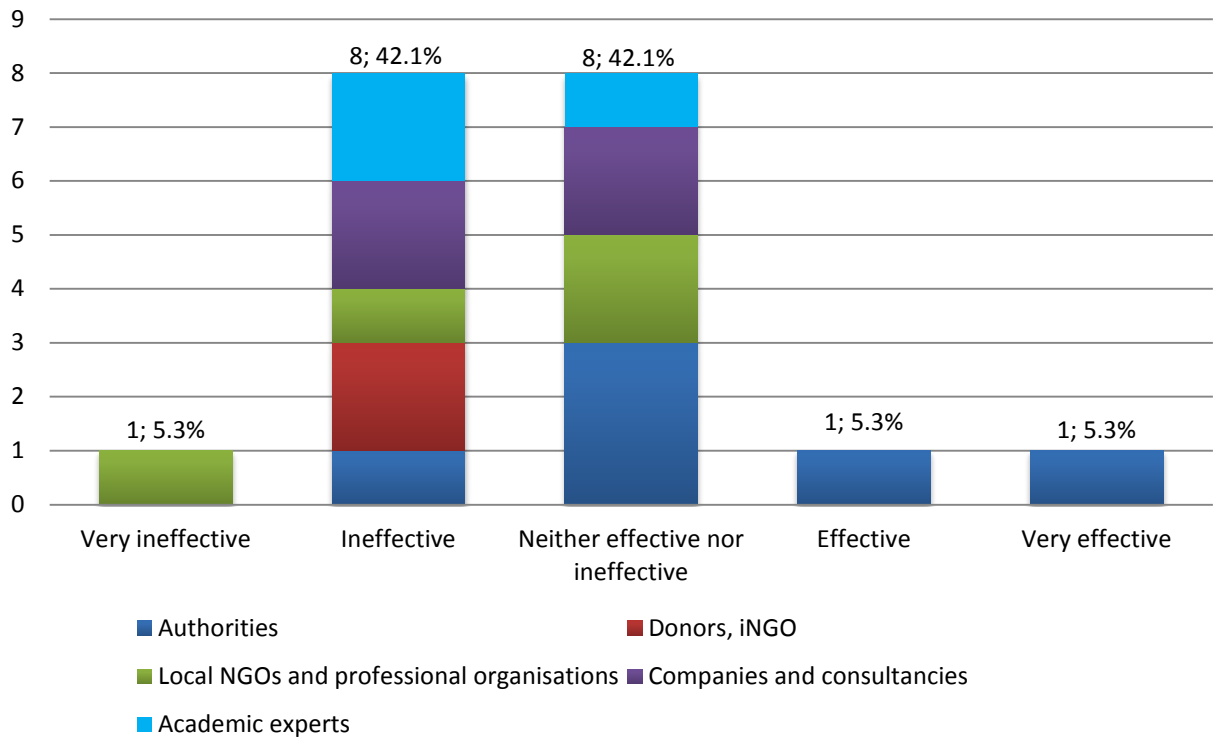


Figure 5.9 The effectiveness of public involvement

Despite public involvement being promulgated in a number of laws and legal documents, its target groups have not been defined specifically and appropriately. According to respondents, this problem leads to the numerous of shortcomings regarding the transparency and effectiveness of this instrument.

> *The regulations do not define clearly who can get involved in the public participation. The main objects defined in the law are representatives of local people's assembly, local people's committees and fatherland front committees. They are under the state management system whereas independents, civil and professional organisations are not given opportunities to partake in the process.* (029, local NGOs and professional organisations)

> *I could say that the local people's committee cannot adequately represent the voice of local people. They are under the state management system and they cannot displease their superiors.* (022, local NGOs and professional organisations)

Furthermore, respondents also raised their concern about the timing of conducting public involvement, when EIS is approved it is too late and there is a lack of guidelines or appropriate mechanisms for interested groups to participate, therefore it is argued, public involvement becomes simply a formality.

According to our LEP, public consultation is 'text-heavy', which means proponents need to gather response letters from some consulted organisations. Consequently, proponents don't care much about the way of conducting sufficient public consultation and they do not care much about information-obtaining techniques. In my opinion, it should work from both ends. On the one hand, the project owner must provide adequate information to the community. One the other hand, they need to allow the community to participate proficiently and also gather adequate information from the local community. So it depends very much on the professional level of those who deliver this instrument. In Vietnam, people only do what the State requires them to do, not taking into consideration the effectiveness of this method, so I think its performance is also not so good. (042, local NGOs and professional organisations)

Information disclosure is very limited. You cannot find any EIS on the internet. Citizens are not well informed about the projects and proponents mainly provide information regarding clearance compensation and visible mitigation measures such as minimising dust, noise and vibration during the construction process, whereas long-term impacts or invisible impacts will be omitted. (015, donors and international NGOs)

5.10. Human resources

Interviewees were asked to give their opinions about the effectiveness of human resources for Vietnam's EIA system. Figure 5.10 illustrates an overview of these stakeholders' perspectives.

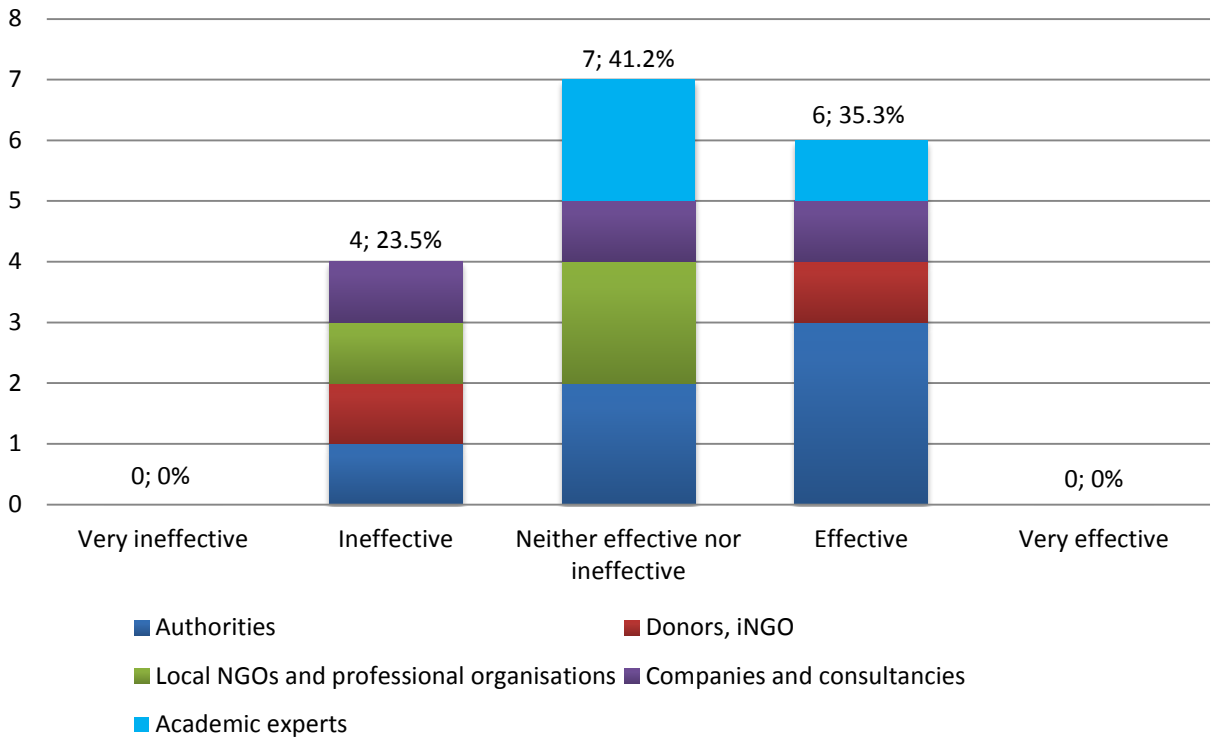


Figure 5.10 The effectiveness of human resources for EIA

Overall, 40% of respondents (n=7) held neutral viewpoints while 35% (n=6) of them had positive opinions and 23.5% (n=4) were negative about this concern.

People who were positive about the system are quite confident about the number of well-educated and experienced experts as a result of the long evolution of Vietnam's EIA system.

> *Vietnam has practised EIA for a long period of time. During that time, numerous specialists have participated in many training courses for EI and SEA that have been organised inside and outside the country. Therefore, the quality of human resources must have been enhanced over this time.* (022, local NGOs and professional organisations)

However, it is widely accepted that the quality of human resources varies from province to province, and also between provincial level and the national level. Highly qualified and experienced specialists tend to work in the big cities and provinces, leading to the lack of sufficient human resources for less developed regions or remote areas.

For management agencies, Vietnam has a relatively complete implementational and organisational structure and numerous officers work for environmental protection agencies. However, respondents have doubts about the ratio of high quality officers in these agencies, especially at the local levels.

> *It was okay in terms of organisation. However, I can see that the human resources at the Ministry level are relatively higher than those at the local level. There is almost no one responsible for EIA at the district level. There is also a lack of manpower, especially training for people so that they can understand the real nature of the EIA.* (040, local NGOs and professional organisations)

> *There are few people who can really do the job at the State's management agencies. Some people can do it, some do not understand. There is a lack of manpower to carry out the report appraisal; hence, almost no manpower for inspection and investigation.* (015, donors and international NGOs)

In addition, interviewees report that there are a huge number of consultancies working in the field nationwide. However, the qualities of these organisations also vary and low quality consultancies seem to prevail.

5.11. Financial resources

Financial resources spent in Vietnam's EIA system are argued to be the weakest section of the system. Overall, as presented in Figure 5.11, eight out of 15 individuals (53%) complained that this is an obstacle for delivering effective EIS for several reasons while only two respondents (13%) were positive concerning this.

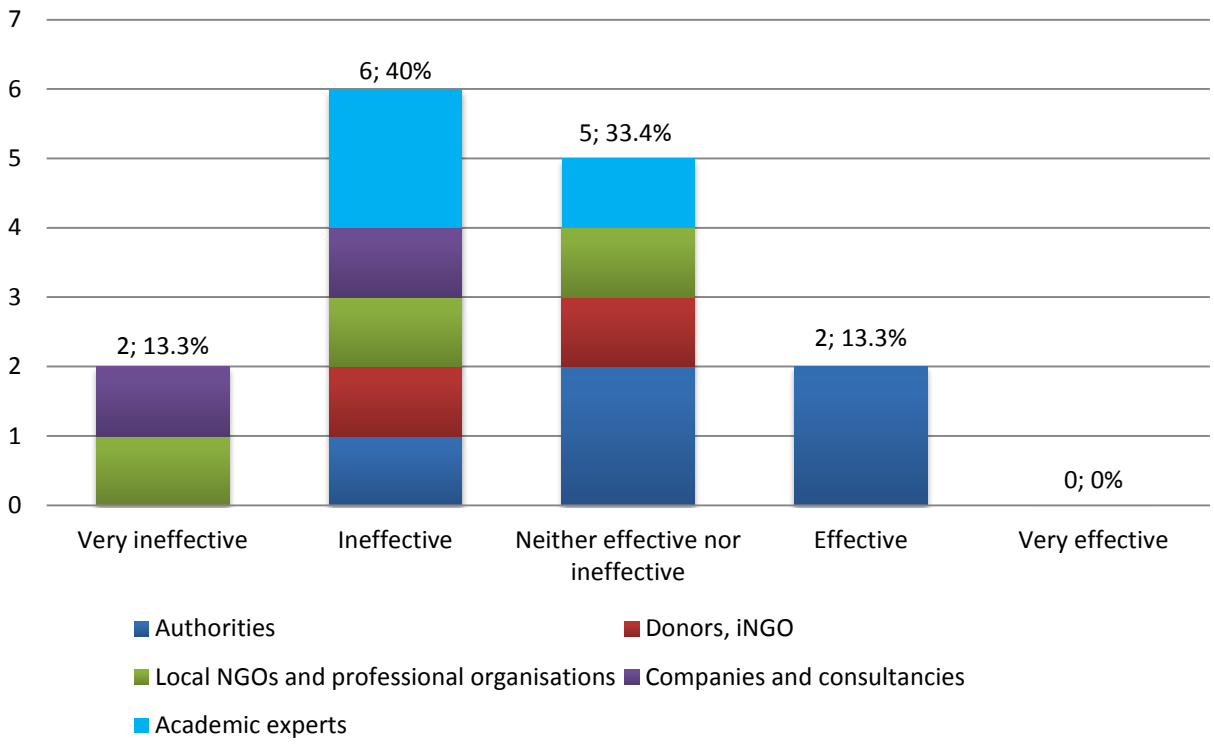


Figure 5.11 The effectiveness of financial resources for EIA

The two positive people, who come from the authorities group, share their viewpoint of positive financial resources because Vietnam clearly defines the budget spent for appraisal activities based on the total investment in the project. This budget, therefore, is sufficient for appraisal activities despite the fact that financial resources spent on the post-EIA activities are insufficient.

> *From the point of view of an appraisal agency, I only understand the appraisal cost so I will not comment on the costs for EIS preparation. But I think that the appraisal cost is sufficient.* (002, authorities)

> *I have no idea about the cost for EIA spent by proponents. Currently, there are enough funds to cover the appraisal cost. However, the fund for post-EIA is not enough*. (011, authorities)

In contrast, seven comments were made about the ambiguous regulations concerning the total budget spent on technical and impact assessment activities, because it is legally required that proponents are responsible for the cost of conducting EIA. This problem leads to the most significant issues of delivering good EIS among consultants. To be specific, first, the overall objective of proponents for conducting EIA is to achieve an EIS approval at least cost. Secondly, as was mentioned in section 5.10, there are a number of low quality consultancies who are willing to minimise the cost of conducting EIA to compete with other consultancies, leading to numerous poor EIS to be delivered.

> *However, there are not enough financial resources allocated for the EIA, or in other words, the forecast and prevention of environmental impact. This leads to the fact that people are*

forced to do the EIA with a cost that is as low as possible, so people do not really care about investing in the EIA. For example, people are more willing to hire a consultant who charges a lower fee than one who charges higher fees, despite the fact that the former one will provide inappropriate solutions for the projects. (003, authorities)

So this is also a weakness of the Vietnamese system because there will be unfair competition on prices, while investors will only select whoever offers a lower price; especially when people have not fully understood the meaning of the EIA and only treat it as a procedure. So if we offer the right fee, people will think that we mean to make up the money to get more profit. Financial resource mobilisation in Vietnam is poor; while financial resource use is only of an average level. (042, academic experts)

5.12. Conclusion

This Chapter shows the stakeholder's perspectives about the effectiveness of Vietnam's EIA system based on the results of the interviews with five main groups of participants. It can be seen from the previous sections that each group of stakeholders has a relatively different perspective about the effectiveness of the various elements of Vietnam's EIA system. Overall government respondents tend to hold more optimistic viewpoints about the system than non-government interviewees. Interestingly, donors and international NGOs, local NGOs and professional organisations, who work indirectly with the EIA system in Vietnam and focus mainly on observing the system, usually have more negative viewpoints about the effectiveness of the system.

An overview of the effectiveness of Vietnam's EIA system and key findings about the strengths and weaknesses of Vietnam's EIA system as well as acceptable recommendations to tackle its shortcomings will be discussed in the following Chapter.

CHAPTER 6. DISCUSSION AND CONCLUSION

This research project set out to evaluate the effectiveness of Vietnam's Environmental Impact Assessment system to find out where in the process, and in which ways, practice should be enhanced based on the perspectives of various key stakeholders participating in the system.

Two different research methods were utilised in this study:

I. A broad content analysis in light of the revolution of the EIA system in Vietnam as well as relevant legal frameworks, policies and technical guidelines used for this instrument. Content analysis has been used to develop an evaluation framework to examine Vietnam's EIA system based on the successful evaluation frameworks of other authors and considering the specific situation in Vietnam. This was also used to investigate the current EIA process within Vietnam, its evolution and practical shortcomings during the development process.
II. An interview process which sought the opinions of key stakeholder groups who had intensive insights and experience of, or interest in, Vietnam's EIA system. This process was undertaken to understand the stakeholder perceptions of the EIA system in the country and their opinions about the strengths and barriers of the system.

Accordingly, Chapter 2 presented a background of evaluation frameworks for EIA systems that have been applied by a number of researchers across the globe. Based on that, an evaluation framework was developed and is presented in Chapter 3. Chapter 4 provided an overview of the evolution of Vietnam's EIA system. Chapter 5 then illustrated the stakeholder's perspectives regarding the effectiveness of Vietnam's EIA system.

This Chapter presents the key findings in regards to the strengths and weaknesses of Vietnam's EIA system based on the results of the content analysis and stakeholder's viewpoints. The Chapter also provides some possible recommendations to improve the performance of Vietnam's EIA system.

6.1. The effectiveness of Vietnam's EIA system

Results from the content analysis presented in Chapter 4 and perspectives of stakeholders demonstrated in Chapter 5 about the strengths and challenges of Vietnam's EIA system are quite consistent. Table 6.1 presents an overview of the effectiveness of Vietnam's EIA based on the synthesis of the content analysis and stakeholder's assessment of the main elements of the country's EIA system.

The "effectiveness" of all components presented in Table 6.1 is the synthesis of the results of interviews and content analysis. The criteria were evolved centred on the grades given by interviewees on the basis of comments given for their choices, and based on results from other information sources such as journal articles, media articles, government reports and conference presentations.

Table 6.1 The overall effectiveness of Vietnam's EIA system

No.	*Criteria*	*Effectiveness*	*Comments*
1	How effective is the legal provision for EIA?	Effective	The system has undergone a number of changes; however there are still uncertainties because there is insufficient background data during the formulation process
2	How effective is the consideration of alternatives in EIA?	Ineffective	Not legally required, EIA is conducted too late in the project cycle when a project's location, scales and technical designs were already defined
3	How effective is the screening process?	Effective	Screening is determined by law; it is good in the country's conditions to avoid corruption, but it is inflexible and cannot consider cumulative impacts
4	How effective is the current scoping of impacts?	Neutral	Not legally required, however, scoping will be reviewed during the appraisal process
5	How effective are Environmental Impact Statements in supporting decision making?	Neutral	The actual role of EIS in the decision making process is unclear
6	How effective is the EIS review process?	Ineffective	The review process will urge proponents to enhance the quality of their EIS, however, its transparency is questionable and it may be influenced by political factors or corruption
7	How effective are appraisal committees in decision making for EIA?	Neutral	An appraisal committee is the advisory unit only. The final decision is made by an appraisal agency, not the committee. However, their comments provide a good base for proponents and EIA consultants to enhance their EIS
8	How effective is monitoring, auditing and mitigating of impacts?	Ineffective	Post-EIA is rarely conducted due to the lack of human and financial resources spending for these activities
9	How effective is public consultation and participation in the EIA process?	Ineffective	The mechanism for public involvement is unclear; it only focuses on local communities. EIS is usually not available and approachable to the public
10	How effective are the human resources in the current EIA system?	Neutral	Vietnam has a large number of EIA practitioners, however, human resources are distributed unevenly among the central and provincial levels
11	How effective is the financial resource spending for the EIA?	Ineffective	Financial resources spending for EIA is not adequate because EIS quality is not the key factor in getting approval

6.2. The strengths

Overall, after more than 30 years of development, the EIA system in Vietnam has undergone a number of changes and improvements. Accordingly, currently, Vietnam has EIA legislation that informs and guides the screening, scoping, selection of alternatives, as well as auditing and monitoring.

Vietnam also has sufficient organisational and implementation structures with a large number of environmental protection agencies functioning from central level to local levels. It is widely accepted that Vietnam's EIA system has undergone a long period of development and a large number of projects are undertaken each year. Therefore, the country has numerous experienced and well-educated EIA experts and practitioners who can potentially contribute to enhance the practical performance of the system.

Despite being blamed for a number of limitations, prescribed screening can be considered as one of the strengths of Vietnam's EIA system. It allows a quick and transparent way to decide whether or not EIA is required for a project and can help to avoid corruption.

The role of the appraisal committees in the decision making process is vague; however, to some extent, they still contribute positively to the effectiveness of Vietnam's EIA system thanks to their rich experience. Comments given by appraisal committee members provide the basis for proponents and EIA consultants to enhance the quality of their EIS.

6.3. The challenges

6.3.1. The weight given to environmental aspects in the decision making process

As discussed in Chapter 5, a number of major problems for Vietnam's EIA system result from inadequate weight being given to environmental considerations compared with economic development priorities:

- The conflict between LOI 2014 and LEP 2014 about the role of EIA in the decision making process. The LOI 2014 priorities to simplify the investment procedure and thus limit the role of EIA in the decision making process;
- The poor quality of alternatives selection while locations, technical designs and scales of projects were determined in the investment grant before EIA being conducted;
- The lack of independence of the EIS review process while it is influenced by economic and political factors; and
- The limited role of the appraisal committee in the final decision.

Consequently, the substantive role of EIA in the decision making process is blurred and it has become more formalistic. There is the need for some synthesis solutions that allow Vietnam to head towards

sustainable development by ensuring its priorities for economic development are in parallel with environmental protection.

6.3.2. The quality of decision making processes on EIS approval

EIA performance in Vietnam is hindered by the lack of independence and the quality of the decision making process on EIS approval. As presented in Chapter 5 (sections 5.6 and 5.7), respondents identified that the process can be influenced by political factors or may be influenced by corruption. In addition, the role of the appraisal committees in the decision making process is vague. This problem will negatively affect the effectiveness of EIA performance as well as the quality of EIS. In other words, proponents have no motivation to carry out their EIS at the highest quality. A vast majority of interviewees shared the opinion that the quality of decision making process plays a core role and it influences the effectiveness of most other elements of Vietnam's EIA system.

6.3.3. The need for sufficient environmental database

Lack of sufficient databases for EIA and baseline data of the current environment introduces a number of obstacles for Vietnam's EIA system. These obstacles include the following:

- Hindering the quality of EIA legislation: numerous items of EIA legislation were enacted based on other countries' environmental conditions. For example, the screening list for EIA was argued to be inflexible. It can be too stringent for some kinds of projects while can omit some other significant projects.
- Limiting the quality of the decision making process, especially for considering the capacity of local environment and cumulative impacts.

6.3.4. The quantity and quality of technical guidelines

Technical guidelines play a very important role in any EIA system, especially in Vietnam when scoping of impacts and selection of alternatives are not legally required but will be reviewed during the appraisal process. These guidelines will provide a base for a consultant to conduct EIA for a particular project. There have been some technical guidelines for projects in major sectors such as hydropower plants and paper processing, however, currently, EISs in Vietnam are prepared according to the general guidelines defined in appendix 2.3 of Circular 27/2015/TT-BTNMT which apply to all projects. This guideline, however, focuses on guiding the main contents that must be included in an EIS, rather than guiding the scoping of actions or technical methods for conducting an EIA.

6.3.5. The transparency of the system and mechanisms for public involvement

There are a number of problems regarding the effectiveness of public involvement in Vietnam. Such involvement is merely a formality because of the legal requirement to undertake public involvement with local communities. A clear mechanism and guidelines for civil and scientific societies to partake in and to review EISs is lacking as are clear requirements for information disclosure. Consequently, EISs are not accessible to the public. Proponents and EIA consultants only send a brief of their EIS to the

local civic organisations to seek a response letter and organise a meeting with representatives of affected people. However, they usually omit and oversimplify the impacts of their projects and this limits affected people gaining sufficient information about what may be effected and how they may suffer.

6.3.6. The lack of post-EIA activities

Post-EIA activities in Vietnam focus mainly on approval of the construction of waste treatment facilities rather than periodically monitoring their operation. Furthermore, once EIS is approved, post monitoring and auditing activities are rarely conducted due to the lack of human and financial resources and the weaknesses in the regulation of post-EIA activities whereas, the public has no power to observe the compliance of any project. This feature was argued by most respondents to be the poorest component of Vietnam's EIA system.

6.4. Recommendations to improve the EIA system

1. Vietnam should enhance the weight given to environmental factors in the decision making process by reviewing the investment process for proposed projects in its LOI and considering EIS approval as one of the main features for decision making in investment approval. Otherwise, in order to meet its objective of simplifying the investment procedure and reducing the time for investment application in parallel with the effectiveness of alternative selection, Vietnam can divide its EIA procedure into two main steps.
    - The first steps can be an initial environmental evaluation that requires the proponents to answer a checklist regarding the potential environmental impacts of the project and its alternatives. Based on the checklist, environmental protection agencies can consider these alternatives as the basis of cumulative impacts with other projects in the areas and local environmental resilience capacities. This will provide decision makers with information about whether or not they should approve the project in its specific location.
    - The second step can be a full EIA and should be conducted in parallel with the technical design process. In this step the EIA can focus on mitigation measures for environmental impacts.
2. To enhance the quality of the EIS review and appraisal process, the country should clearly define the responsibility of decision makers for the risks of the projects that they approve. In case some serious environmental damage occurs, the decision makers of the project need to be disciplined by the Government and be made responsible for those impacts.
3. All EISs should be published online and become more accessible. If they are being observed and supervised by the public, poor quality EIS are likely to be subject to complaints and decision makers, proponents and EIA consultants will be urged to be more responsible for their works.
4. Vietnam should establish a set of criteria for EIS appraisal that decision makers should base their work on in order to consider the EIS of any project. This set of criteria also allows proponents to sue decision makers if their decision is not reasonable. For instance, based on the criteria, if an EIS

is of the same quality as another one that has been approved, it should be approved as well. In case it is rejected, then the proponent can contest the decision. This will motivate proponents and EIA consultants to focus on improving the quality of EIS, rather than corruption occurring.

5. EIA legislation should be enhanced in order to give the most consistent and accessible mechanisms for everyone to raise their voices about a project.
6. Public involvement should be conducted throughout the EIA process of a project from alternative selections to post auditing.
7. The public and civil societies should be allowed legally to participate in post-EIA activities and be able to observe the compliance of proponents.
8. There is also a need to carry out more technical guidelines for conducting EIA for any of the types of projects that are listed in appendix 2 of Decree 18/2015/ND-CP.
9. Vietnam should establish its national database of environmental conditions consisting of current conditions for the country's various environmental components. DONRE and MONRE need to set up and manage a common data base that is accessible for all environmental managers and EIA practitioners. This will not only allow EIA practitioners to see the overall picture of the environmental conditions but also reduce significantly the cost involved in conducting EIA.
10. MONRE and DONRE also should also set up their EIA database to include all EIS that have been submitted for appraisal. This database should be made available and published for the public to access.

To sum up, this research project carried out an overview of Vietnam's EIA system, its evolution, its effectiveness, strengths and challenges based on a synthesis methodology of content analysis and seeking and analysing stakeholder's perspectives via interviewing. To do so, the thesis also developed an evaluation framework for evaluating the effectiveness of an EIA system that has been applied successfully to Vietnam's EIA system. This framework may bring a means to the common methods of evaluating effectiveness of other EIA systems, especially those in developing countries. It would be useful for future research to consider integrating the comparative evaluation of the effectiveness of two or more EIA systems that may bring more insights into the effectiveness of an EIA system in a particular social and political context. Importantly, in addition to face to face interviews, stakeholder perceptions can be collected via online surveys which will definitely gain broader results. Comparative evaluation and collecting data by surveys in this way were not undertaken for this research due to the time limitations.

Despite these limitations, this work is of great importance because it developed and proved a reasonable framework and method of evaluating EIA effectiveness in a developing country via the perspectives of key stakeholders within the system. Accordingly, it carried out a comprehensive overview of the effectiveness of Vietnam's EIA system, its strengths, weaknesses and plausible

recommendations in order to improve performance of the system. Particularly, this research investigate a number shortcomings hindering the effectiveness of Vietnam's EIA system that have never been sorted out before in any literatures (for example, the conflicts between the investment procedure promulgated by LOI and EIA procedure promulgated by LEP). This overview and framework should be adopted in other developing nations who are undergoing a similar evolution within their EIA structure in order to ensure that EIA is carried out as effectively as possible throughout developing regions.

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Appendix 1. Interview schedule

INTERVIEW SCHEDULE

Project: A critical evaluation of EIA performance in Vietnam

ID _____

Hello, thank you for giving me time and allowing me to ask you some questions regarding your opinion about the process of EIA in Vietnam. Reason for my research is to investigate the strengths and weaknesses of the current EIA system in Vietnam as well as looking for reasonable solutions to enhance its performance. Your opinions will provide me invaluable materials to achieve these objectives.

The first set of questions is to find out from you a little about your experience of working in EIA in Vietnam.

Section 1: General information

1. How long have you been working in the field of environmental impact assessment (EIA) in Vietnam?

☐ Less than one year

☐ 1 to 2 years

☐ 3 to 5 years

☐ More than 5 years

2. What is your role working on environmental impact assessment (EIA) in Vietnam?

3. How would you rate your understanding of the current EIA system in Vietnam?

1	2	3	4	5
Very Poor	Poor	Neither Good nor Poor	Good	Very Good

Please give the reason for your choice:

Moving to the second set about your opinion regarding various important elements of the EIA system in Vietnam. In your opinion, how would you rate the success of these elements in practice?

Section 2: Main elements of EIA system in Vietnam

	Very Ineffective	*Ineffective*	*Neither effective nor ineffective*	*Effective*	*Very Effective*
4. How effective is the legal provision for EIA in Vietnam? Please give the reason for your choice:	1	2	3	4	5
5. How effective is the consideration of alternatives (e.g. Alternative locations, scale, technical design etc.) in EIA? Please give the reason for your choice:	1	2	3	4	5
6. How effective is the screening process? Please give the reason for your choice:	1	2	3	4	5
7. How effective is the current scoping of impacts? Please give the reason for your choice:	1	2	3	4	5
8. How effective are Environmental Impact Statements in supporting decision making? Please give the reason for your choice:	1	2	3	4	5
9. How effective is the EIS review process Please give the reason for your choice:	1	2	3	4	5
10. How effective are appraisal committees in decision making for EIA? Please give the reason for your choice:	1	2	3	4	5
11. How effective are monitoring and auditing and mitigating of impacts? Please give the reason for your choice:	1	2	3	4	5
12. How effective are public consultation and participation in the EIA process? Please give the reason for your choice:	1	2	3	4	5

13.	How effective is the human resource of current EIA system? Please give the reason for your choice:	1	2	3	4	5
14.	How effective is the financial resource spending for the EIA? Please give the reason for your choice	1	2	3	4	5

15. What are the main challenges facing by Vietnam's EIA system?

16. During the consultation process of formulating the Law of Environmental Protection 2014, numerous recommendations were put forward to improve the EIA legal system of Vietnam. In your opinion, do you think there have been changes since 2014 that have improved the legal system for EIA in Vietnam?

    Yes ☐ No ☐

    Please explain your choice:

17. In your opinion, what needs to be done, if anything, to improve Vietnam's EIA system?

18. Do you have any final comments regarding the current EIA system in Vietnam?

I'll be analysing the information you and others gave me and submitting a draft report of my research in one month. I'll be happy to send you a copy to review at that time, if you are interested. Thank you for taking the time to answer my questions.

Appendix 2. Stakeholders' responses to the interviews

ID	Participant group	Organisation	Criteria 1	Criteria 2	Criteria 3	Criteria 4	Criteria 5	Criteria 6	Criteria 7	Criteria 8	Criteria 9	Criteria 10	Criteria 11
002	Authorities	Agency for Environmental Impact Assessment and Appraisal, MONRE	4	3	4	4	4	4	4	4	3	3	3
003	Authorities	Agency for Environmental Impact Assessment and Appraisal, MONRE	4	4	4	4	4	4	4	3	3	2	3
004	Authorities	Agency for Environmental Impact Assessment and Appraisal, MONRE	4	5	4	4	5	4	4	3	3	4	x
005	Authorities	Agency for Environmental Impact Assessment and Appraisal, MONRE	4	3	4	4	4	4	4	4	4	4	4
009	Authorities	Hanoi Department of Natural Resources and Environment	5	5	4	5	5	5	5	4	5	4	4
011	Authorities	Yen Bai Department of Natural Resources and Environment	4	4	3	4	2	4	3	2	2	3	2
015	Donors and international NGOs	The World Bank Vietnam	3	2	3	3	3	3	3	2	2	2	3
017	Donors and international NGOs	ADB Vietnam	4	x	x	x	x	x	x	x	x	x	x
020	Donors and international NGOs	GiZ Vietnam	4	3	3	3	3	3	3	1	2	4	2
022	Local NGOs	PanNature	2	1	2	2	2	2	2	3	2	3	3
024	Local NGOs	Vietnam chamber of commerce and industry	3	1	x	x	2	x	x	x	1	x	x
026	Local NGOs	Vietnam Association for Environmental Impact Assessment	3	2	4	2	1	2	3	3	3	2	1
029	Local NGOs	Green ID centre	3	3	2	3	2	2	4	2	3	3	2
030	Companies and consultancies	Centre for environment and community research	4	1	4	4	4	1	4	2	3	4	2
036	Companies and consultancies	Centre for sustainable community development	x	x	x	x	x	x	x	2	2	x	x
039	Companies and consultancies	The Institute of Geography	3	3	2	4	4	2	2	3	2	2	1
040	Companies and consultancies	Vietnam Environmental and Sustainable Development Institute	4	2	3	3	4	4	4	3	3	3	x
038	Academic Experts	Hanoi University of Technology	4	2	4	4	3	3	3	4	3	3	3
042	Academic Experts	Hanoi National University	4	2	2	3	3	3	2	2	2	4	2
046	Academic Experts	Hanoi National University	x	3	1	3	3	3	4	1	2	3	2

Appendix 3. The Law on Investment no. 67/2014/QH13 dated 26/11/2014

Article 30. The National Assembly's authority to issue decisions on investment policies

Except for the projects subject to issuance of decisions on investment policies by the National Assembly according to regulations of law on public investment, the National Assembly shall issue decisions on investment policies of the following projects:

1. Projects that have significant effects on the environment or potentially have seriously affect the environment, including:

a) Nuclear power plants;

b) Projects that change purposes of land in national parks, wildlife sanctuaries, landscape sanctuaries, experimental forests of 50 hectares or larger; headwaters protective forests of 50 hectares or larger; protection forests meant for protection against wind, sand, waves, land reclamation, environmental protection of 500 hectares or larger, production forests of 1,000 hectares or above;

2. Projects that change purposes of land meant for rice cultivation with two or more crops of 500 hectares or larger;

3. Projects that require relocation of 20,000 people or more in highlands; 50,000 people or more in other areas;

4. Projects that require special policies decided by the National Assembly.

Article 31. The Prime Minister's authority to issue decisions on investment policies

Except for the projects subject to issuance of decisions on investment policies by the Prime Minister according to regulations of law on public investment and the projects mentioned in Article 30 of this Law, the Prime Minister shall issue decisions on investment policies of the following projects:

1. The following projects regardless of capital sources:

a) Projects that require relocation of 10,000 people or more in highlands; 20,000 people or more in other areas;

b) Construction and operation of airports; air transport;

c) Construction and operation of national seaports;

d) Petroleum exploration, extraction, and refinery;

dd) Betting and casino services;

e) Cigarette production;

g) Development of infrastructure of industrial parks, export-processing zones, and specialized sectors in economic zone;

h) Construction and operation of golf courses;

2. Projects not mentioned in Clause 1 of this Article in which investment is VND 5 billion or above;

3. Projects of investment of foreign investors in sea transport, provision of telecommunications services with network infrastructure; afforestation, publishing, journalism, establishment of wholly foreign-invested science and technology organizations or science and technology companies;

4. Other projects subject to issuance of decisions on investment policies by the Prime Minister as prescribed by law.

Article 32. Authority to issue decisions on investment policies of the People's Committees of provinces

1. Except for the projects subject to issuance of decisions on investment policies by the People's Committee of the provinces according to regulations of law on public investment and the projects mentioned in Article 30 and Article

31 of this Law, the People's Committees of provinces shall issue decisions on investment policies of the following projects:

a) Projects that use land allocated or leased out by the State without auction or bidding or transfer; projects that require changes of land purposes;

b) Projects that use technologies on the List of technologies restricted from transfer prescribed by regulations of law on technology transfers.

2. The investment policies of investment projects in Point a Clause 1 of this Article executed at industrial parks, export-processing zones, hi-tech zones, and economic zones in conformity with planning approved by competent authorities are not subject to approval of the People's Committees of provinces.

Article 32. Documents and procedures for decision on investment policies by the People's Committees of provinces

1. A project dossier consists of:

a) A written request for permission for execution of the investment project;

b) A copy of the ID card or passport (if the investor is an individual); a copy of the Certificate of establishment or an equivalent paper that certifies the legal status of the investor (if the investor is an organization).

c) An investment proposal that specifies: investor(s) in the project, investment objectives, investment scale, investment capital, method of capital rising, location and duration of investment, labour demand, requests for investment incentives, assessment of socio-economic effects of the project;

d) Copies of any of the following documents: financial statements of the last two years of the investor; commitment of the parent company to provide financial support; commitment of a financial institutions to provide financial support; guarantee for investor's financial capacity; description of investor's financial capacity;

dd) Demand for land use; if the project does not use land allocated, leased out by the State, or is not permitted by the State to change land purposes, then a copy of the lease agreement or other documents certifying that the investor has the right to use the premises to execute the project shall be submitted;

e) Explanation for application of technologies to the project mentioned in Point b Clause 1 Article 32 of this Law, which specifies: names of technologies, origins, technology process diagram, primary specifications, conditions of machinery, equipment and primary technological line;

g) The business cooperation contract (if the project is executed under a business cooperation contract).

2. 7. The investor shall submit the dossier specified in Clause 1 of this Article to the registry office.

Within 35 days from the day on which the project dossier is received, the registry office shall notify the investor of the result.

3. Within 03 working days from the day on which the satisfactory dossier is received, the registry office shall send written requests for opinions from the regulatory agencies as prescribed in Clause 6 of this Article.

4. Within 15 days from the receipt of the project dossier, the inquired agencies shall send written responses to the registry office.

5. The land authority shall provide copies of maps, the planning authority shall provide information about planning as the basis for making appraisal as prescribed in this Article within 05 working days from the receipt of the registry office's request.

6. Within 25 days from the day on which the investment project dossier is received, the registry office shall make

and submit an appraisal report to the People's Committee of the province. The report shall contain:

a) Information about the project: information about the investor, objectives, scale, location, and duration of the project;

b) Assessment of the foreign investor's fulfilment of investment conditions (if any);

c) Assessment of conformity of the investment project with the master socio-economic development planning, industrial planning, and land planning; assessment of socio-economic effects of the project;

d) Assessment of investment incentives and fulfilment of conditions for investment incentives (if any);

dd) Assessment of legal basis of investor's rights to use investment premises If a request for allocation of land, lease of land, or change of land purposes is made, the investor's fulfilment of conditions for using land, land allocation, land lease, and change of land purposes shall be assessed in accordance with regulations of law on land;

e) Assessment of technologies applied to the investment project (if the project is one of those mentioned in Point b Clause 1 Article 32 of this Law).

7. Within 07 working days from the receipt of the project dossier and appraisal report, the People's Committee of the province shall issue the decision on investment policies. In case of rejection, a written response providing explanation shall be made.

8. The decision on investment policies made by the People's Committee of the province shall specify:

a) Name of the investor in the project;

b) Name, objectives, scale, investment capital, and duration of the project;

c) Location of the project;

d) Schedule for project execution: schedule for capital contribution and capital raising; schedule for infrastructural development and inauguration (if any); schedule of each stage (if the project is divided into multiple stages);

dd) Applied technologies;

e) Investment incentives, support, and conditions (if any);

g) Effective period of the decision on investment policies.

9. The government shall specify the documents and procedures for appraising investment projects of which investment policies are decided by the People's Committees of provinces.

Article 34. Documents and procedures for decision of investment policies by the Prime Minister

1. The investor shall submit the project dossier to the local registry office. The dossier consists of:

a) The documents mentioned in Clause 1 Article 33 of this Law;

b) Land clearance and relocation plan (if any);

c) Preliminary assessment of environmental impacts and environmental protection measures;

d) Assessment of socio-economic effects of the project.

2. Within 03 working days from the day on which the satisfactory dossier is received, the registry office shall send it to the Ministry of Planning and Investment and send written requests for opinions from the regulatory agencies as prescribed in Clause 6 of this Article.

3. Within 15 days from the receipt of the request, the inquired agencies shall send written responses to the registry office and the Ministry of Planning and Investment.

4. Within 25 days from the day on which the project dossier is received, the registry office request the People's

Committee of the province to appraise the project dossier and send it to the Ministry of Planning and Investment.

5. Within 15 days from the receipt of the documents mentioned in Clause 4 of this Article, the Ministry of Planning and Investment shall appraise the project dossier and make an appraisal reports as prescribed in Clause 5 Article 33 of this Article, the request the Prime Minister to issue decisions on investment policies.

6. The Prime Minister shall consider deciding investment policies as prescribed in Clause 8 Article 33 of this Law.

7. The government shall specify the documents and procedures for appraising investment projects of which investment policies are decided by the Prime Minister.

Article 35. Documents and procedures for issuance of decision on investment policies by the National Assembly

1. The investor shall submit the dossier to the local registry office. The dossier consists of:

a) The documents mentioned in Clause 1 Article 33 of this Law;

b) Land clearance and relocation plan (if any);

c) Preliminary assessment of environmental impacts and environmental protection measures;

d) Assessment of socio-economic effects of the project;

dd) Proposed special policies (if any).

2. Within 03 working days from the day on which the satisfactory dossier is received, the registry office shall send the project dossier to the Ministry of Planning and Investment, and then the Ministry of Planning and Investment shall send a report to the Prime Minister and request an establishment of an Appraisal Council.

3. Within 90 days from its establishment, the Appraisal Council shall appraise the project dossier and make a report in accordance with Clause 5 Article 33 of this Law, then submit it to the Prime Minister.

4. At least 60 days before the opening of the General Meeting of the National Assembly, the Government shall submit the decision on investment policies to the agency in charge of appraisal of the National Assembly.

5. The decision on investment policies shall be enclosed with:

a) The Government's report

b) The project dossier prescribed in Clause 1 of this Article;

c) The appraisal report made by the Appraisal Council;

d) Relevant documents.

6. Appraisal contents:

a) Fulfilment of the criteria for identification of a project subject to issuance of decisions on investment policies by the National Assembly;

b) Necessity of the project;

c) Conformity of the project with the master socio-economic development planning, industrial planning, and land and other resources planning;

d) Objectives, scale, location, time, schedule for project execution; demand for land use, land clearance and relocation plan, selection of primary technologies, environmental protection solutions;

dd) Capital investment and capital raising plan;

e) Assessment of socio-economic effects;

g) Special policies; Investment incentives, support, and conditions (if any).

7. The Government and relevant entities are responsible for providing sufficient information and documents serving

the appraisal; provide explanation for the project contents at the request of the agency in charge of appraisal of the National Assembly.

8. The National Assembly shall consider passing a Resolution on investment policies, which consists of:

a) Name of the investor in the project;

b) Name, objectives, scale, investment capital, duration of the project, capital contribution and capital raising schedule;

c) Location of the project;

d) Schedule of the project: schedule of infrastructural development and inauguration (if any); schedule of achievements of primary targets and items; targets, duration, and operations of each stage (if the project is divided into multiple stages);

dd) Applied technologies;

e) Special policies; Investment incentives, support, and conditions (if any);

g) Effective period of the Resolution on investment policies.

9. The Government shall specify documents and procedures for appraisal of project dossiers by Appraisal Council.