EIA effectiveness in Vietnam: key stakeholder perceptions

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ABSTRACT

In line with its rapidly transforming economy, thousands of development proposals undergo Environmental Impact Assessment (EIA) in Vietnam each year. Since its inception in 1993, Vietnam's EIA system has undergone numerous amendments via a suite of legislative reforms to the Law on Environmental Protection (LEP) and its associated Circulars and Decrees, a testament to the Government's will to improve environmental performance. Here we evaluate the effectiveness of Vietnam's EIA system through a unique empirical study focusing on those engaged in the EIA system undertaken in Hanoi in 2016 comprising 20 semi-structured interviews with respondents from government, NGOs, academia, and industry. By evaluating the effectiveness of the EIA system in Vietnam from the stakeholder perspective, this paper aims to identify where, how, and why the EIA system is effective or otherwise. Stakeholders vary in their perceptions of the system. Those external to it identified several inhibiting characteristics. Results suggest that like other developing countries and jurisdictions, Vietnam's EIA procedural performance falls short of EIA goals. Criticisms of discordant dual planning law and environmental management laws, fragmented decision making, conflicts of interest in appraisal committee appointments, and information deprivation that impedes public participation suggest that like other developing countries and jurisdictions, Vietnam's EIA performance, in practice, faces several challenges that potentially undermine its role in environmental protection.

1. Introduction

Environmental Impact Assessment (EIA) is widely recognised as a process that assesses the possible effects of a proposed development prior to decisions and commitments being made. Since its 1970s enactment in the United States EIA is now practiced widely around the globe within an array of different contexts. From the 1980s EIA was introduced to developing countries (particularly Asia and Latin America) ‘under pressure from development aid agencies’ (Doberstein, 2004: p.290) but also to emulate the practice of Western counterparts (Hostovsky et al., 2010). For example, to access loans or development aid the World Bank and other bilateral development agencies require the use of EIA (Hostovsky et al., 2010). During the late 1980s and early 1990s several international agencies – including those financially aiding the development process, helped to expand and influence the practice of EIA in developing countries including the Organisation for Economic Cooperation and Development (OECD), the World Bank, Asian Development Bank, and the United Nations Environment Programme (UNEP) (Ha-Duong et al., 2016; Li, 2008). The sustainable development agenda also provided ‘additional momentum’ for the adoption of EIA through Principle 17 of the Rio Declaration (Wood, 2003a).

In the developing world, there are many challenges to overcome regarding EIA implementation and within systems themselves (Kamijo, 2017; Marara et al., 2011; Sano et al., 2016), and EIAs are not having their intended impact (McCullough, 2017). This is partly explained by the ‘export’ of the original technical model of EIA from the US and applying it to planning environments and cultures that are very different (Doberstein, 2004; Khosravi et al., 2019; McCullough, 2017; Wells-Dang et al., 2016). As such, the adoption of EIA by developing countries is considered to be a procedural formality rather than a suitable mechanism to avoid environmental and social harm from development activity (Baird and Frankel, 2015; Li, 2008). Regardless of its known limitations, EIA is upheld as critical in fostering sustainable development in Asia where continuing rapid economic development is coupled with large infrastructure and industrial projects (Chu, 2020; Khadka and Shrestha, 2011; Sano et al., 2016). This paper responds to the call for research that provides a contrast of how is EIA practiced from a developing country perspective (McCullough, 2017).

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Based on a set of purposefully designed criteria, Clausen et al. (2011) presented a critical analysis of EIA policy and practice in Vietnam to 2011. This paper builds on the Clausen et al. study. We are mindful of the importance of contextual factors and the difference of political and social conditions and their influence on EIA effectiveness, especially for developing countries (Khosravi et al., 2019; Marara et al., 2011). Here we present an analysis of the effectiveness of Vietnam’s EIA system from the perspective of professionally qualified stakeholders who either work within the EIA system or are familiar with it and so have an insight into current practice. Capturing the perceptions of those engaged in the EIA process in Vietnam has not been undertaken before and provides fresh insights into this system. Of the different approaches to considering EIA effectiveness (discussed later), this study evaluates procedural effectiveness, with the overall objective of isolating where, how, and why the current EIA system is effective or otherwise.

The 1980s commencement of political and economic reforms in Vietnam has been followed by rapid industrialisation and an economic boom (Ha-Duong et al., 2016; Nguyen and Pham, 2012; Nielsen, 2003). Nationwide, thousands of major socio-economic development projects are implemented each year (Toan, 2015). According to Pham et al. (2020) from 2011 up to the present Vietnam has produced approximately 7,000 EIA reports and each year approximately 250 EIA reports are approved by MONRE. The Provinces also conduct EIAs with an estimated average annual approval rate of 35 EIAs per locality. Such rapid development places considerable pressure on Vietnam’s natural resources and threatens environmental quality (Chu, 2020; Clausen et al., 2011; Pham et al., 2020). The Vietnamese Government and international aid organisations regard 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 introduced some environmental protection measures in 1985 to minimise the environmental impact of its rapid growth but it was not until 1993 that EIA legislation was enacted in the 1993 Law on Environmental Protection (LEP). Since then the practice of EIA has grown substantially (Toan, 2015). The LEP’s technical and legal framework for EIA in Vietnam was reviewed and revised in 2005 and again in 2014 mandering numerous circulars, decrees, and technical guidelines. However, it has been argued that while Vietnam has relatively strong legislative provision for EIA, implementation is ineffectual (Clausen et al., 2011; Doberstein, 2003; Obbard et al., 2002).

### 1.1. Effectiveness of EIA

It is generally accepted that the fundamental goal of EIA is to ensure environmentally sound and sustainable development (UNEP 1987) by anticipating significant environmental impacts of development proposals in advance of a decision or commitment to proceed (Cashmore et al., 2004). The effectiveness of EIA may be explained as the extent to which it achieves this central purpose (Cashmore et al., 2004; Jay et al., 2007; Morgan, 2012; Ortolano et al., 1987; Sadler, 1996; Wood, 2003b)—put simply, is EIA making a difference, and if so, how? (Jay et al., 2007: p.290). What constitutes EIA effectiveness however, is much debated. There is ongoing interest in the performance of EIA and sustained speculation about its environmental and socio-economic benefits (Almeida and Montano, 2017). The last 50 years of EIA practice has failed to achieve its desired outcomes, and there are serious criticisms about its effectiveness (Almeida and Montano, 2017; Morgan, 2012).

Views about EIA effectiveness are directly connected to perceptions about the ‘nature and purpose’ of EIA as perceived by the examiner (Bond et al., 2012; Elling, 2009; Zvijakova et al., 2014). Table 1 presents a summary of lenses through which EIA may be considered and which then inform evaluation approaches (Pope et al., 2013) (Adapted from Bond et al., 2012; Chanchitpricha and Bond, 2013; Morgan, 2012).

| Lenses through which to investigate EIA effectiveness |
|-----------------------------------------------|
| **Procedural** | EIA is carried out according to established expectations; e.g. complies with procedures, follows best practice principles, adheres to regulations. The procedural lens brings attention to the guiding principles of impact assessment processes. It draws attention to what and how the procedures or policy are implemented. It is focused on practice. |
| **Substantive** | EIA is achieving its purpose; e.g. EIA mitigates negative impacts. The substantive lens centers attention upon the attainment of stated objectives of impact assessment (as identified within a decision-making framework). |
| **Transactive** | EIA contributes to environmental protection through efficient use of expertise, time, and resources (including personnel). The transactive lens draws attention to skills and roles of practitioners (capacity), time taken and costs. |
| **Normative** | EIA influences values and behaviours of actors. This normative lens (through the purview of actors engaged in the process) inspects various influences that might bring about change to consent and decision making, such as, incremental changes within institutions, organisations, philosophies, science, and culture. |

(Adapted from Bond et al., 2012; Chanchitpricha and Bond, 2013; Morgan, 2012).

#### 1.2. Criteria developed to investigate EIA systems

Numerous criteria have been created by which to interrogate EIA systems (Li, 2008; Ortolano et al., 1987; Sadler, 1996; Wood, 2003b). Legitimate evaluations of EIA effectiveness are explicit about the context (socio/political/cultural) within which the assessment is being conducted (Cashmore et al., 2004, 2009; Marara et al., 2011; Morgan, 2012) and so too are the solutions provided (Zvijakova et al., 2014) because such context directly influences performance of EIA implementation (Marara et al., 2011) and as summed up by Griffett (1999: p.334):

“EIA cannot be effective unless there is the political will to make it succeed, a legal and institutional infrastructure to enforce and control its operation, adequate technical expertise to see it through and appropriate educational awareness of all development personnel.”

#### 1.3. Evolution of EIA in Vietnam

EIA in Vietnam has been evolving since 1993 when the country’s first Law on Environmental Protection (LEP) was enacted. It has a clear implementation structure and consistent procedures for assessing major projects. Clausen et al. (2011, p.137) identify three phases of EIA in Vietnam (See Table 2).

Prior to 2011 EIA in Vietnam mainly focused on the preparation and appraisal of EIAs. This meant that screening and scoping requirements including consideration of location, scale, and technical design were mostly defined before the EIA commenced. In 2011, Decree No. 29/2011/ND-CP introduced several procedural changes affecting screening, EIS content, access to information, public participation, and monitoring and enforcement. Since Clausen et al.’s evaluation EIA has continued to evolve and here, we suggest a fourth phase can now be added: 2011-present—Enhancement phase’, characterised by ongoing EIA reform and improvement of practice. The LEP 2014 (Vietnam National Assembly 2014) introduced the following improvements:

- Earlier conduct of EIA in the major project cycle

EIA must be conducted concurrently with the formulation of an investment project or during a feasibility study. Approval of the EIS is the grounds for achieving project investment.
Table 2. Phases of EIA in Vietnam.

| Period | Phase                  | Description                                                                 |
|--------|------------------------|-----------------------------------------------------------------------------|
| Before 1990 | Learning phase          | Investigation into the use of EIA as an instrument for environmental management through pilot projects. |
| 1990–1994 | Formalisation phase    | Introduction of EIA in Vietnam’s LEP                                          |
| 1995–2010 | Implementation phase    | Development of capacity for undertaking EIA                                    |

(Source: Adapted from Clausen et al., 2011).

- **Enhanced professional capacity of EIA practitioners**

  Under the LEP 2014, decree 18/2015/ND-CP, as a primary condition for working in the field all EIA practitioners must acquire a certificate in EIA consultancy. This is expected to enhance the quality of professional capacity for EIA.

- **Expanded public consultation requirements**

  Prior to 2014, proponents were not required to consult directly with affected parties. However, under Article 21 of the LEP 2014, proponents are now required to organise consultation meetings with directly affected households.

1.4. Vietnam’s current EIA process

The EIA system in Vietnam is governed through the Law on Environmental Protection No 55/2014/QH13, the Decree on Environmental Protection Planning, Strategic Environmental Assessment, Environmental Impact Assessment, and Environmental Protection Plans No 40/2019/ND-CP (at the time of writing it was Decree No 18/2015/ND-CP), and the Circular on Strategic Environmental Assessment, Environmental Impact Assessment and Environmental Protection Plans no 27/2015/TT-BTNMT.

Vietnam has a tiered administration for EIA and requires coordination between different ministries with many staff and environmental protection agencies at central, provincial and district levels (Baird and Frankel, 2015; Ha-Duong et al., 2016; Pham et al., 2020). Ministries and departments engaged in the administration of the EIA process include the Ministry of Natural Resources (MONRE), and its agencies and district offices, the Ministry of National Defence, the Ministry of Public Security, and the People’s Committee of each province. The administering authority is decided according to project type, location, and size. According to Toan (2015), MONRE has about 100 officers working directly on EIA, and other ministries have approximately 50 staff. Among the 63 environmental agencies at the provincial level, approximately 1,130 staff members work at DONRE. Of these, around 323 officers work directly on EIA (Pham et al., 2020). According to Baird and Frankel (2015) while the environment ministry is endowed with the responsibility for administering the EIA process, ‘it is often trumped’ by the more powerful Ministry of Planning and Investment.

Vietnam’s EIA process is in set out in Figure 1 and Figure 1b and is described in detail in the following section.

1.4.1. Screening and scoping

In Vietnam screening is prescribed in law and by-law regulations. Appendix II of Decree 18/2015/ND-CP lists projects for which an EIA is automatically required and Appendix IV lists exempt projects. For projects not appearing in Appendix II or Appendix IV, an Environmental Protection Plan (EPP) must be submitted by proponents detailing mitigation measures for preparation, construction, and operation phases of their project.

The Ministry of Natural Resources and Environment (MONROE) has produced EIA Technical guidelines for 22 different project types including a range of urban development, industrial, energy and mining activities (See Sano et al., 2016). The guidelines in Circular 27/2015/TT-BTNMT however, are general, stipulating the main elements and contents required of an EIS such as description of environmental and socio-economic conditions; potential impacts anticipated during preparation, construction, and operation phases; and proposed mitigation measures and monitoring activities.

Once a development proposal triggers an EIA, the proponent must follow Circular 27/2015/TT-BTNMT guidelines for preparing an EIS. Apart from guidelines defined in the Circular, requirements for the scoping of issues are not clearly defined in Vietnam’s other legal documents. Scoping of impacts, like the selection of alternatives, is the responsibility of, and conducted by EIA consultants. In practice, scoping of impacts is not thoroughly conducted, and EIS TORs are hardly ever created. In most cases, consultants will conduct their EIA and prepare their EIS following exactly Circular 27’s guidelines.

1.4.2. The EIS

On completion, a proponent’s draft EIS, must be published and sent to the relevant Provincial People’s Committee and civic organisations seeking their feedback. These organisations are given 15 days to respond. Prior to 2014, non-response was taken as acceptance of an EIS. The LEP 2014 amendments require proponents to organise a meeting with representatives of affected communities. Feedback and meeting minutes signed by the proponent and the local authority are included in the final EIS, together with the proponent’s response.

1.4.3. EIS review

Article 14 of Decree 18/2015/ND-CP (14/02/2015) defines which agency will be responsible for appraising an EIS taking into consideration the sector, scale, location, and other characteristics of a proposal. A proponent submits their documentation to the appropriate authority for their EIS’s appraisal (e.g. MONRE, DONRE or other ministry) together with other project documents (such as technical reports). Annex III of Decree 18/2015/ND-CP has a list of project types that must be reviewed by MONRE. Projects not appearing on the list may be reviewed by DONRE or other ministries. Upon receipt of a proponent’s documents, an appraising agency has five days to decide if submissions are acceptable and to seek supplementary information from the proponent for inadequate, or invalid submissions. Once a proponent’s documents are deemed acceptable an appraisal committee is established; a full appraisal must be conducted by MONRE within 45 days of lodgement. For projects appraised by other authorities (e.g. DONRE or other ministries), this process must be undertaken within 30 days.

For all jurisdictions, appraisal committees consist of at least seven members selected from related authorities or academic institutions. One
third of committee members must have more than seven years' EIA experience. According to Sano et al. (2016) there are 40 MONRE employees within the EIA review division, 14 in the Ministry of Transportation, and 15–20 in each provincial People's Committee. MONRE reviewed 115 EIAs from 2010 to 2014, an average of 31 projects per year while provincial People's Committees review approximately 30 reports including Strategic Environmental Assessment (SEA), EIA, and post-EIA reports.

Through their critique, appraisal committees in Vietnam's EIA system play an important role in determining the quality of EISs. Opinions of appraisal committees provide the basis for decision-makers to approve EISs. The results of an appraisal process can be approval without amendment; conditional approval or; rejection. In practice, virtually no EIS is approved without amendment. In cases where conditional approval is granted, proponents must respond to appraisal committee comments. Should an EIS be refused, the proponent must submit a new EIS for appraisal.

In Vietnam according to Article 25 of Law 11/2014/QH13EIA approval of the EIS, articulated in Article 14 of Decree 18/2015/ND-CP, is an essential condition to advance investment approval and certification, exploration, and extraction approvals and permits in other ministries. In practice though, sometimes projects are constructed and implemented without an approved EIS, risking a penalty of $9000 - $11000 USD (Item 4, Article 11 of Decree no. 155/2016/ND-CP).

Acquiring an investment license requires submission of various documents which differ depending on the licence granting authority. The Law of Investment (2014) (LOI) endows three different authorities with power to grant investment approval: The National Assembly, the Prime Minister or, Provincial People's Committees (PPC). For a project granted by the National Assembly or by the Prime Minister an Initial Environmental Examination (IEE) report is required (there are no guidelines defining the content of IEEs in the LEP 2014, or any related legislation); PPCs do not require an IEE. In deciding to grant investment approval all three decision-making authorities are required to consult with other specialised state management agencies, including environmental protection agencies, which are given 15 days to comment (Vietnam National Assembly, 2014).

Once an EIS has been approved and an investment licence granted, a proponent must lodge technical and construction designs with specialist agencies (e.g. the Ministry of Construction, or Ministry of Science and Technology), before project commencement.

1.4.4. Monitoring and follow-up

Under the LEP 2005, post-monitoring and mitigation is the responsibility of the proponent. During construction and operation phases, proponents are required to submit environmental monitoring reports to relevant authorities. Auditing and compliance, however, is rarely conducted due to the lack of government human and financial resources devoted to this activity; and environmental protection agencies are activated only when prompted by community complaints.

1.5. Dual decision-making processes for development

It is significant to note the two overlapping decrees influencing major project approvals. Decision-making for EIA and decision-making for project approval are two separate and relatively independent processes, often carried out in parallel. The LEP 2014 stipulates that an EIA will commence during the preparatory stage of the project cycle and that appraisal of an EIS serves as the grounds for an investment decision. Approval of the EIS should serve as the precursor for decision-making on investment. However, the decision as to whether a project may commence is made via an investment licence defined in the Law on Investment (LOI) No. 67/2014/QH13 and may result in an approval for a project to proceed before an EIA has been conducted or completed. In practice there is a gap between the role of EIA regulated in the LEP 2014 and approval decisions under the LOI 2014. This legislative incongruity has encouraged a 'power struggle' between the environmental and planning ministries; and when approvals are made in the absence of an authentic EIA the system works in favour of pro-development interests.
versions of principles for EIA” (Wood, 2003b: p.12). The evaluation framework applied here combines criteria developed by Wood (2003b) and Sadler (1996) based upon the representation of the stages in the EIA process illustrated in Figure 1 (see Table 3). According to (Loomis and Dziedzic, 2018), differences in the criteria for procedural evaluations are few. Rodríguez-Luna et al. (2021) provide a thorough review of the various authors and countries where Wood’s criteria have been replicated or adapted to local conditions.

EIA engages a wide variety of practitioners and experts across various disciplines (government employees, consultants and other experts). This diversity ‘opens the possibility’ that perceptions and practices may well differ about the adequacy of an EIA system (Morgan et al., 2012), possibly with contested opinions. Numerous perception studies have been utilised as one means by which to investigate effectiveness of EIA in many different jurisdictions including: a comparative study of the United Kingdom and France designed to better understand the interpretation and tensions associated with a specific cross-jurisdictional ‘harmonisation’ objective of the European Union (Glasson and Bellanger, 2003); Morrison-Saunders and Bailey’s 2003 study examined practitioner perspectives of the importance and quality of science in a Western Australian context (Morrison-Saunders and Bailey, 2009), a Polish study canvassed the opinions of experts as to the usefulness of EIA guidelines and instructions (Tokarczyk-Dorociak et al., 2019); in South Africa regulators were surveyed to ascertain perceptions about the benefits of EIA (Roos et al., 2020); and in Brazil, Duarte et al. (2017) present the findings of a survey that explored the perceptions of the Brazilian system (its process and quality of EISs). All these studies present the respective positions of those engaged and were able to illustrate specific elements perceived to be of success or otherwise.

The perceptions of a range of EIA practitioners, and others with a sound knowledge of the EIA system in Vietnam were canvassed to gather insights into Vietnam’s EIA system in practice. Understanding the perceptions of EIA practitioners can help to signal where in the system attention might be given for reform, highlight issues of controversy as exceptions of EIA practitioners can help to signal where in the system as well as agreement (Morgan et al., 2012; Duarte et al., 2017).

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 Conservation of Nature and Environment; and authors of media articles about the current EIA system; or because of poor health. In total, 20 face-to-face interviews were conducted during March and April, 2016, in Hanoi, Vietnam. Table 4 provides an overview of stakeholders participating in the study. Half of the respondents represent government and industry (those directly engaged in the EIA system) and the other half represent those with knowledge of the EIA system but who are separate from it.

Participants were asked to give their opinions about the effectiveness of several aspects of Vietnam’s EIA system and to suggest some possible solutions to improve the system based on their experiences. Interview length varied from 40 min to one hour. Eighteen interviews were recorded on a cell phone. The details of two interviews were documented as written notes on request of the interviewees.

The audio-recorded interviews were transcribed from Vietnamese into English into word documents. 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.

3. Results

More than half of the respondents (n = 12 of 20) across four of the five respondent groups thought that the legal provision for Vietnam’s EIA system is sound (See Figure 2). Reasons for this positive response were explained by the commitment to continuous improvement of the system over a long period of time. Respondents representing Local NGOs and professional organisations did not rate legal provision highly.

Some participants noted that decentralisation of environmental management in Vietnam (as defined by the LEP 2005 and LEP 2014) has contributed to a weakening and fragmenting of decision-making processes which undermines the effectiveness of Vietnam’s EIA system. These respondents noted the conflict between the LEP and the LOI 2014 and how this has affected the system. Participants used the example of the incongruence of an LOI investment license being issued by a Provincial Committee (prioritising development goals), while a district Committee appraises the EIA under the LEP. This creates a situation where environmental matters are subordinate to development priorities:

“Since investment license is granted under the LOI, no one cancels projects due to environmental concerns raised by an EIA” (ID 022, Local NGOs and Professional Organisations).

### 3.1. Perceptions as to the effectiveness of the professional capacity within current EIA system

As illustrated in Figure 2, most respondents were ambivalent about professional capacity within Vietnam’s EIA system. Seven of the 17 who answered this question said that professional staff were ‘neither effective nor ineffective’, six responded positively (3 of these were government authorities), while four respondents from four different respondent groups held negative opinions on the matter.

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Table 3. Evaluation framework for the effectiveness of Vietnam’s EIA system.

| Criteria* | |
| --- | --- |
| How effective is the legal provision for EIA? | |
| How effective are the human resources of the current EIA system? | |
| How effective is the consideration of alternatives in EIA? | |
| How effective is the screening process? | |
| How effective is the current scoping of impacts? | |
| How effective are Environmental Impact Statements in supporting decision making? | |
| How effective is the EIS review process? | |
| How effective are appraisal committees in decision making for EIA? | |
| How effective is public consultation and participation in the EIA process? | |
| How effective is monitoring and auditing and mitigating of impacts? | |

* Criteria were rated on a Likert scale from 1 ‘very ineffective’ to 5 ‘very effective’ and respondents asked to give reasons for their selection.
Positive responses assumed that staff working for an extended period on EIAs would have developed expertise:

"Vietnam has been practising EIA for a long period of time. During that time, numerous specialists have participated in many training courses for EIA and SEA 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).

An alternative perception was that the quality of professional capacity varies from province to province, and between national and provincial levels. It was suggested that while Vietnam has a clear organisational structure for environmental protection (See Figure 1b) highly qualified and experienced specialists tend to work in big cities and provinces but there is a lack of trained professional staff in regional and remote areas:

"I can see that the human resources at the Ministry level are better 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).

Li (2008) notes an additional complication, suggesting that within this administration, EIA is poorly coordinated between levels of government, a point confirmed by a respondent in this study:

"When making requests [for information] 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).

In addition, interviewees reported that the quality of the many consultancies practising nationwide varies; low quality consultancies seem to prevail.

3.2. Perceptions as to the effectiveness of the consideration of alternatives in EIA

Consideration of alternatives is not a legal requirement of EIA in Vietnam, and so if this procedure is conducted it is done so due to the willingness of proponents. Among the 18 respondents who provided opinions about this, eight affirmed that consideration of alternatives for projects is hardly influenced by EIA (See Figure 3a). Of these 18, 12 believed 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 exacerbated by the conflict between the LEP 2014 and the LOI 2014. Of note, only EIA authorities responded positively about the process of consideration of alternatives.

3.3. Perceptions as to the effectiveness of the screening process

Almost half of the interviewees in this study (n = 8 of 20) believed that the prescriptive approach to screening is sound in Vietnam (see Figure 3b). Five of these eight were government officers. There was divergence between groups in terms of their perception of the screening process. Overall, respondents felt that the biggest advantage to the

### Table 4. Characteristics of respondent groups.

| Respondent Type                          | Characteristics and justification for interview                                                                 | No. Interviewed |
|------------------------------------------|---------------------------------------------------------------------------------------------------------------|-----------------|
| Authorities                              | Representatives of government working in environmental protection. Have knowledge of the EIA system (e.g. make decisions, implement EIA regulations, appraise EISs). | 6 (30%)         |
| Donors and International NGOs            | Independent parties. May have comparative viewpoints (e.g. compare Vietnam’s EIA system to other countries).  | 3 (15%)         |
| Local NGOs and professional organisations| Participants (both direct and indirect) in the EIA process, or, interested in aspects of the system (e.g. public participation; biological conservation; natural resource management; wildlife protection). May have objective insights about the effectiveness of the EIA system. | 4 (20%)         |
| Companies and consultancies              | EIA practitioners. Have knowledge of the EIA system in practice. May provide insights about the EIA process.   | 4 (20%)         |
| Academic experts                         | Independent parties. May have had practical experience as EIA consultants. Have theoretical understanding of the EIA process and likely to have researched different aspects of EIA and its application. | 3 (15%)         |
| Total                                    |                                                                                                              | 20 (100%)       |
screening-by-law (prescribed screening) is that it has simplified administrative procedures for new projects. Several respondents believed that prescriptive screening reduces the time taken for an EIA and enhanced cost-effectiveness and that it helps to avoid corruption. Conversely, other respondents argued that the prescribed list is inflexible and includes too many insignificant projects and yet misses some significant ones. It was noted that proponents have been known to design projects to fall ‘below’ the limits of screening criteria that would trigger an EIA: Investors are very sharp and can work around the law. 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 trigger an EIA, or trigger an EIA at a lower level [e.g. DONRE] (020, International NGOs and Donors).

3.4. Perceptions as to the effectiveness of scoping of impacts

Figure 3. Perceptions as to the effectiveness of various EIA processes (3a alternatives selection; 3b Screening of actions; 3c Scoping of Impacts; 3d Quality of EIS to inform decision-making).

Just over half of respondents believed the conduct of scoping was either ‘very effective’ or ‘effective’ (see Figure 3c). Respondents selecting positively (e.g. government, private sector or academic expert representatives) noted the important work of appraisal committees in requesting revision of inadequate documents.

According to one respondent, EISs are considered by a capable appraisal committee with rich experiences in the field.

"They will give their comments to enhance the scope of impacts for proponents" (011, EIA Authorities).

Respondents representing independent groups (donors and local and international NGOs and professional organisations) were less positive about the effectiveness of the scoping process pointing out some scoping limitations. Impacts are not classified in any legal document, so identification of significant impacts is the proponents’ responsibility. The quality of the scoping exercise is dependent on what a proponent is willing to spend, and on the capacity of their consultants. Consequently, it is not possible to guarantee the quality of scoping activities. In addition, according to several respondents, the technical guidelines are insufficient to instruct the conduct of this step of the EIA process. While the guidelines dictate the ToR for EISs they lack detail on how to scope impacts:

"Scoping in our EIA system is weak because the technical guidelines are deficient. Most of [the guidelines] refer to the content of the EIS; they are not guidelines for conducting EIA. As a result, EIA consultants are disoriented concerning where they should collect data and at what scale to assess the impacts" (026, Local NGOs and Professional Organisations).

3.5. Perceptions as to the effectiveness of environmental impact statements EIS in supporting decision-making

Participants’ opinions of EIS effectiveness differed markedly between stakeholder groups (see Figure 3d). Government authorities, and private company representatives and their consultants were more positive about the effectiveness of EISs. Some of these respondents gave positive ratings because EISs are the only instruments by which to manage environmental aspects of development activities, and because these documents go through an appraisal process. Academic experts and donors and international NGOs were non-committal in their appraisal. In contrast, respondents representing local NGOs and professional organisations were of the view that the completion of the EIS was merely a formality due to:

lack of transparency of the decision-making process; conflict between attracting investment and protecting the environment; lack of baseline data; insufficient technical guidelines; and insufficient resources.

"The key issue does not seem to lie with the quality of the EIS; it lies with its influence on the decision-making process. So, the quality of the EIS does not play any realistic role. I’m not sure if decision-makers consider [EISs] before making a decision" (022, Local NGOs and Professional Organisations).

3.6. Perceptions as to the effectiveness of the EIS review process

Several of the interviewees thought that the role of EIA in Vietnam was to propose mitigation measures for environmental impacts of proposed projects and that it is not the role of EIA to decide project approval. Approval is given rather, by agencies managing investment. Respondents
in this study evaluated the effectiveness of EIS review in the context of EIA's current function. Overall, interviewees from government authorities were more positive about the role of the review process than any other respondent group, believing it to be either 'very effective' or 'effective' (See Figure 4a).

Positive perceptions were that the review urges proponents and their consultants to enhance their EIS prior to its approval and final decision. Conversely, all 10 academics, donors and international NGOs held neutral or negative opinions about EIS review because the process gives insufficient weight to the quality of EISs. The perception held by some respondents was that review of EIS quality largely depends on the willingness or compliance of leaders in environmental protection agencies. Respondents raised concerns about the lack of independence of the review, and lack of transparency regarding EIS approval; it was suggested that the process is open to the influence of vested interests:

‘Decisions are too dependent on the subjective opinion of decision makers [rather than content and quality of EISs]’ (026, local NGOs and professional organisation).

### 3.7. Perceptions as to the effectiveness of public consultation and participation in the EIA process

Public involvement in the EIA process has been a legal requirement of Vietnam’s EIA system since the LEP 2005, and, the government has expended effort to enhance it. Respondents cited numerous shortcoming, however, regarding the effectiveness of public participation. Respondents acknowledged that public involvement is promulgated in several laws and legal documents, but according to Figure 4b, most interviewees doubt whether the public contribute to Vietnam’s EIA decision-making process; only two respondents from government authorities gave a positive rating.

Almost half of the participants, (nine out of 19) believed that public participation in EIA falls below expectations. Only two respondents, EIA government authorities, had positive views. Respondents were concerned about the late timing of public involvement, after the EIS is approved, and so the public is unable to influence the process. This is coupled with the difficulty faced by the public in accessing EIA documents and information, as well as an absence of guidelines and/or mechanisms encouraging interested groups to participate:

“According to our LEP, proponents need to gather response letters from some consulted organisations [such as the PPC or other groups, such as fisheries associations]. Proponents don’t really care much about conducting their public consultation or information-collection. In my opinion, it should work from both ends. On the one hand, the project owner must provide adequate information to the community. On the other hand, they need to allow the community time to participate and to gather adequate information from the local community. So, it depends very much on the proponents’ professionalism. In Vietnam, people only do what the State requires them to do. They don’t take into consideration the effectiveness of this method [public participation], so I think its performance is 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 projects’ (015, Donors and International NGOs).

According to participants in this study, proponents fulfill legislative requirements of public engagement by providing local civic organisations with summaries or ‘briefs’ of their EIS. By their very nature, these briefs simplify impacts of projects, and are lacking in detail. Communities may therefore underestimate how they will be affected by a development and their submissions based on partial information are likely to be less critical. Meetings are held with representatives of affected communities; further restricting public engagement.

### 3.8. Perceptions as to the effectiveness of appraisal committees in decision making for EIA

Reflecting on their experiences, just over half of all interviewees (n = 9 of 17) shared positive views about the effectiveness of appraisal committees (See Figure 4c). In contrast, three (of 19) produced compelling arguments against these committees.

Participants claimed that appraisal committees are plagued by conflicts of interest. Examples included agencies nominating committee...
members who are likely to be supportive or who will give favourable comments about a project. Accordingly, interviewees raised concerns about the impartiality of appraisal committees. It was also mentioned that committee members sometimes have direct connections with proponents. If this connection is not disclosed during the appraisal process it has potential to influence the assessment. Experienced EIA consultants can perform roles of EIS appraiser and producer of EIA documentation. This has the potential for committee members to give preferential treatment to some projects over others.

A lack of integration between the LEP and LOI was raised as an example of the inefficacy of appraisal committees and their powerlessness and limited role of the EIS influencing an investment decision:

"Appraisal committees do not play the key role in the decision-making process of project approval; only for the approval of the EIS. The decision-makers for investment licenses rarely consult with the [EIS] appraisal committee before making a decision" (042, Independent experts—academics and retired government employees).

3.9. Perceptions as to the effectiveness of post-EIA activities

Since the introduction of the LEP 2005 and LEP 2014 more attention has been paid to post-EIA activities. Consequently, four respondents were optimistic of the potential for improvement to EIA follow-up activities (three of these respondents were from government authorities) (See Figure 5). Eight others from across the different respondent groups however cited numerous obstacles and were doubtful about likely improvements in practice.

According to respondents lack of clarity in the legislation and limited resourcing for post-EIA activities impedes EIA monitoring and auditing activity. During construction the responsibility for mitigation compliance lies with proponents and their contractors. Some respondents were of the opinion that penalties for non-compliance are too low and so the incentive is lacking for producing a sound EIA that identifies follow-up activity. According to decree no. 179/2013/ND-CP the maximum penalty for violating the LEP regarding EIA matters is 180,000,000 VND (approximately $8,000 USD). This fine is far less than the cost of conducting an EIA and implementing mitigation measures. An additional and important point made during the interviews is that because EISs are not published their details are not publicly available; this makes it difficult for affected communities to engage in targeted post-EIA observation and monitoring.

4. Discussion

This paper responds to the call for research that contrasts EIA in developed and developing countries (McCullough, 2017) and adds to the suite of studies examining procedural aspects of specific systems (See for example Khadka and Shrestha, 2011). Many of Vietnam’s EIA procedural challenges, as identified in this paper, are not dissimilar to those in other systems. For example, limited attention given to consideration of alternatives (Steinemann, 2001) and poorly conducted scoping (Morgan, 2012; Snell and Cowell, 2006); pitfalls of prescribed screening (such as designing projects to fall below screening thresholds) as discussed by Clarke and Menadue (2016) and Pinho et al. (2010); limited opportunities for meaningful public participation (O’Faircheallaigh, 2010); and weak follow-up practices (Morgan, 2012; Morrison-Saunders et al., 2003) which are claimed to diminish the...
quality of the EIA process in many jurisdictions, developed and developing alike. It follows that replicating an EIA system based on the US prototype will inherit its limitations.

Developing countries are recognised though as having additional hurdles to overcome including:

- Legislative constraints (unclear or too ambitious legislation)
- Capacity constraints (may be organisational, human, technical, and/or resource) and
- Political constraints (the extent to which the rule of law is applied)

(Baird and Frankel, 2015; Doberstein, 2004; Enriquez-de-Salamanca, 2018; Kamijo, 2017; Khoievar et al., 2019; Kolhoff et al., 2018; Li, 2008; McCullough, 2017).

Stakeholders engaged in this study are divided in their confidence that the EIA system in Vietnam is meeting its sustainability goals. EIA authorities (government employees) followed by respondents in the private sector were overall, more optimistic about the current system than non-government representatives and academic experts. While acknowledging the small sample in this study, participant perspectives and opinions are worthy of note, and their reasoning should be considered. They point to several legislative, capacity, and political will challenges affecting EIA in Vietnam.

Vietnam appears to be committed to continuous improvement of its EIA system. Over a 30-year timeframe it has undergone several changes and improvements through numerous reforms and amendments to EIA legislation and process. Vietnam’s LEP presents a clear implementation structure and procedure; there are clearly defined organisational and implementation roles across many functioning environmental protection agencies from central to local levels. A complex obstacle particular to Vietnam is the dual and independent paths of its environmental law and investment law that substantially undermine the potential of EIA to perform its intended function. Lack of integration between ministries and between tiers of government compounds this challenge. According to the perceptions of participants in this study, the potential of the environment law is further stymied by lenient penalties, an absence of corrective action, and because power for development approval is situated in a development-oriented ministry. The decision hierarchy which places EIA appraisal below development approval processes is also likely to affect regional locations with less experienced staff more significantly.

In terms of capacity, participants in this study presented mixed views. On the one hand the country has numerous employees at a range of scales working on EIA; many practitioners have been engaged in preparing EISs overtime, and have considerable experience working within the system. The regional variation in terms of expertise and capability (noted by study participants) is important because it exposes potential vulnerabilities or weaknesses in the EIA system in more remote areas potentially ripe for development. In other countries, private sector interests make use of legislative and capacity ‘weak spots’ and seek the smoothest path through EIA approvals processes; specific examples of Australia, Spain, China, Peru and India, South Asia, Albania, Guatemala, Bangladesh, Sri Lanka, and Czech Republic, are provided (Enríquez-de-Salamanca, 2018; Williams and Dupuy, 2017). Ideally, projects likely to have significant environmental impacts will be subject to independent inspection by the concerned public (Glasson and Therivel, 2019). Presently, it appears that legislative requirements are relatively easy to meet but the outcome is that public involvement is at best tokenistic (Hostovsky et al., 2010).

Glasson and Therivel (2019) identify different interests within the ‘concerned public’ including voluntary groups, organisations or pressure groups, and those likely to be affected by a proposed development. The perceptions of respondents in this study would suggest that legislative requirements fall short of the requirement for full and independent inspection of project proposals across groups. Capacity constraints continue to post development follow up activities. Limited human and financial resources, weak regulations and a powerless public make this feature one of the poorest components of Vietnam’s EIA system.

According to McCullough (2017: p.449) having rules and procedures in place may be insufficient to guarantee an effective EIA system because ‘informal rules remain relevant and override formal rules in many developing countries’ serving to disrupt normative processes. Power and agency, play out in this non-visible aspect of EIA decision-making (Cashmore and Richardson, 2013; Enriquez-de-Salamanca, 2018). Political will and buy-in of proponents combined are essential to EIA achieving its intended outcomes (Kolhoff et al., 2018; Williams and Dupuy, 2017). In Vietnam, informal rules affect the efficacy of its EIA system. Findings from this study suggest that these informal rules include nominations for membership on appraisal committees, a disregard for conflict of interest and, issuing of licences in the absence of a completed EIA. The ineffectual position of the LEP in the decision-making process suggests that proponents have little motivation to produce highest quality EISs. It is cheaper to accept a fine for misconduct, and the system appears to be slow in pursuing offenders. These characteristics suggest Vietnam’s EIA system is vulnerable to manipulation in several respects.

5. Conclusion

The application of a structured evaluation framework by which to explore each phase of the EIA process has helped to identify an evidence-base to illuminate where, how, and why Vietnam’s EIA system is effective or not. This paper differs from previous studies about EIA in Vietnam as it is based on the perspectives of those engaged in the system and reflects upon the most recent 2014 reforms. Conclusions are based on salient ideas raised during stakeholder interviews. Results suggest that, like other developing countries, Vietnam’s EIA performance, in practice, faces several significant challenges and its contribution to environmental protection from major development activities is undermined by legislative, capacity, and political constraints singular to Vietnam. It reinforces the importance of inspecting a system from within as context provides the key to understanding the nuances of the process.

This study is an important step in advancing understanding of both formal and informal elements of Vietnam’s EIA system. Questions remain as to whether EIA in Vietnam is protecting the environment from the impacts of development. While Vietnam has a clear system and implementation structure in place, it functions as a stand-alone process and has limited influence over project-cycles and approval processes. Further investigation is required to more deeply test EIA’s performance for individual projects assessed in Vietnam and how they have fared in protection of the environment and people from impacts of major developments.

Declarations

Author contribution statement

B.D. Clarke: Conceived and designed the experiments; Analyzed and interpreted the data; Wrote the paper.

C.C. Vu: Conceived and designed the experiments; Performed the experiments; Analyzed and interpreted the data; Contributed reagents, materials, analysis tools or data; Wrote the paper.

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Data availability statement

The data that has been used is confidential.

Declaration of interests statement

The authors declare no conflict of interest.
