

Reforming EIA system: What should Indonesia do?

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ABSTRACT

Historically, AMDAL (Analisis Mengenai Dampak Lingkungan) or Environment Impact Assessment (EIA) in Indonesia has been practiced over the last 36 years, in 1982. From that time until recently, EIA regulation has been evolved due to political and bureaucracy factors. However, the general feature of EIA in Indonesia is the tendency of stakeholders that EIA considered a mere formality, and administrative matter and weak on implementation. On June 21, 2018, the Indonesia government established the new regulation called the Online Single Submission (OSS) to reduce the duration of environment licensing. This research employed an in-depth analysis by evaluating policy framework and investigating case study to understand of EIA system in Indonesia and consequences that would emerge in streamlining the process. The preliminary results found that Indonesia has to improve its effectiveness of EIA procedure in terms of the primary issue such as public participation, scientific database, and quality of reporting. To achieve the goal of the new streamlining system, Indonesia also needs a systematic action to promote agency capacity and capabilities, develop Information Technology system as the backbone of OSS, and allocate sufficient budget for this system. Lastly, Indonesia should consistent with monitoring activities and level of law enforcement should be enhanced.

Keywords : *EIA, evolution, streamlining, effectiveness*

1. INTRODUCTION

As a preventive environmental policy, EIA is being applied in a wide range of developing countries over the last 30 years (Bitondo et al. 2014; Morgan 2012). EIA in Indonesia was first formally adopted in 1982 (Purnama 2003; Gore and Fischer 2014). However, as in developing countries, the notable weakness has been reported over the time of implementation. This research examines the evolution of the EIA system in Indonesia and evaluates the current system of streamlining EIA procedure. We also investigate 5 selected case studies of Environmental Impact Statement (EIS). For data collection, we conducted face-to-face interviews with 25 participants consist of 6 respondents from the national government (NG); 10 respondents from local government (LG); 5 respondents from EIA Experts; 4 respondents from nickel smelter industry, respectively. This interview conducted several times from October 2017, July 2018 and February 2019 in 8 cities in Indonesia namely Jakarta, Depok, Serang, Cilegon, Yogyakarta, Gresik, Surabaya and Kendari. Lastly, we propose a basic strategy and principal remedies for EIA system and effectiveness of EIA implementation

2. HISTORICAL EVOLUTION OF EIA IN INDONESIA

Primary law and some detailed procedural requirements of Indonesia EIA were first enacted in 1982, further renewed in 1993, and amended in 1999, 2001, 2006, 2012, 2013 and lastly in 2018 (see Table 1). Environmental legislation in Indonesia enacted before the 1999 reform, mostly used the centralized approach (USAID, 2008). Law No. 4/1982 was the first umbrella for environmental management in Indonesia. The law did not provide directions in detail for EIA procedure and guideline regulations were not yet created. In this period, EIA was not widely implemented due to the absence of more detailed and technical execution guidelines. Another factor was due to the lack of understanding of EIA by the stakeholders.

With Government Regulation No. 29/1986 regarding Environmental Impact Analysis, this period represented an important stage in formal EIA implementation. Generally, the procedure of EIA in this period was very complicated. There were some challenges for stakeholders because of its new regulations and the limited experience of EIA stakeholders, also the EIA institutional capacity was not well maintained. Regulation No. 51/1993 was in part a response to accelerate investment, which considered EIA as an obstacle to business activity. This regulation was made simpler and decrease time frame significantly to be 57 days that was only focused on proposed activities with potentially significant impacts.

The enactment of Law No. 23/1997 and Government Regulation No. 27/1999 emphasized on community involvement procedures, centralization of sectoral authority to EIMA and Re-decentralization of EIA implementation to local governments (provinces) as well as cross-border EIA approaches. The end of the Soeharto regime and the switch to a democratic multi-party system, Indonesia de-centralized its political system in 1999. This period was marked by the dissolution of the EIA Appraisal Commission in the sectoral departments and the centralization of EIA implementation by EIMA. EIMA distributes this EIA authority to the provincial level. The EIA process is relatively simple in comparison to the previous EIA schemes. However, at this time there was a very significant decline due to changes in the political situation (Purnama 2003).

EIA which spearheaded the implementation of EIA was dissolved in 2002, and its task function was incorporated into Ministry of Environment (MoE). On the other hand, the policy of regional autonomy has given the government the widest authority to the district and city level including the authority for the EIA process.

3. CURRENT ENVIRONMENTAL PERMIT GOVERNANCE AND EIA PROCEDURE

Presently, the general framework of the EIA system is stipulated by Law No. 32/2009 of the Environmental Protection and Management (EPM). Since 2014, the government tries to increase the level of 'Ease Doing Business Index' and response demand of investor for simplification the licensing procedure by applying information technology and integration of government institution (national and local). Taking this into account, since June 2018 the Indonesia government established the new government regulation No 24/2018 which is called as The '*Online Single Submission*' (OSS) including environmental permit system. An environmental permit is a permit given to businesses that engage in activities which require an environmental protection plan that sets out the steps they will take to protect the environment must obtain an environmental permit as requirements for a business license (CMEA, 2018).

The OSS is business licenses which given on behalf of the central and local government for businesses by an integrated electronic system. This kind of the way to streamline the EIA procedures to reduce the duration of the EIA procedures without amending the EPM Law No 32/2009. Following the Government Regulation No. 24/2018, Minister of Environment and Forestry (MoEF) has stipulated five regulations related to the Environmental Impact Assessment through the OSS system as mentioned in **Table 1**.

To obtain an environmental permit in OSS system there are several steps. *Firstly*, project proponent applies for an environmental permit in OSS by making a commitment to complete the EIA document within a specific timeframe. *Secondly*, businesses will choose whether the business field was part of a business which has to obtain EIA based on MoEF No 5/2012. *Thirdly*, the environmental permit is issued automatically after all the questions have been answered and the commitment statement has been filled but shall only take effect once

the commitment has been fulfilled, including payment of levy and lastly, project proponent complete EIA commitment (CMEA, 2018).

Table 1. EIA Regulation and Guidelines Through OSS

Regulation	Main Content
Decree of MoEF No P.22/MENLHK/SETJEN/KUM.1/7/2018	Integrated Licensing Services in Electronic Scope
Decree of MoEF No P.25/MENLHK/SETJEN/KUM.1/7/2018	Guidelines for Determination of Types of activities requiring non EIA Document
Decree of MoEF No P.26/MENLHK/SETJEN/KUM.1/7/2018	Procedures Assessment and Examination of Environmental Document Through Integrated Electronic System
Decree of MoEF No P.23/MENLHK/SETJEN/KUM.1/7/2018	Criteria for Changing Activities and Procedures for Changing Environmental Permits
Decree of MoEF No P.24/MENLHK/SETJEN/KUM.1/7/2018	Exclusion of Liability Prepare EIA for the Activities Located in City That Has Detailed Spatial Plan.

Duration of EIA completion is 115 days after the statement of commitment of EIA. This new environmental permit system will decrease complexities and reduce potential delays following the integration of inter-ministerial and regional governments in issuing permits but questionable in terms of environmental audits, and less requirement on the quality standard.

4. RESULT AND DISCUSSION

We indicate that there are some of the potential negative impacts that would be emerged as a result of streamlining EIA procedure. It is necessary to reflect several notable factors that will influence the effectiveness of this new policy.

a. Regulatory Framework and Guidelines

The transformation of Indonesia's impact assessment policy and procedure for several times, has reflected the changes both political and institutional. After all of evolution policy provisions and guidelines in Indonesia's EIA system were quite comprehensive and specifically regulate all major stages of EIA activities such as guideline for scoping and screening process, public participation, monitoring, evaluation of EIS, and determine institutional role. The latest new environmental permit system attempts to maintain an open investment environment but for some aspects have lacked clarity. Despite the excellent environmental regulations in place, based on interview with respondent from all stakeholders, the level of law enforcement and compliance has not been satisfactory.

Government Regulation No. 24/2018 that transforming the environmental permit procedure into a fast-track approval would potentially overlap with principal law and others government regulation if not carried out a comprehensive study, ignore synchronization and harmonization of other regulations (result of interview with NG and LG). We can see that it will potentially against precautionary and adaptive management principles and threaten for successful EIA practice.

b. Public Participation

In Indonesia's EIA, public participation usually starts at the scoping stage of the project. Citizens have equal rights and opportunities to play an active role, such as contributing

information, opinions, advice, or even complaints. Public consultation in Indonesia includes two components: a public hearing and written comments to the EIS. Public participation has been prevalent across these public hearings, predominantly by local people near the project site. Prior to conduct public consultation, the project proponent has to announce in daily local newspapers. But often the coverage and the intention of local people was really low. Public participation activities for the five cases study can be seen in **Table 2**.

Table 2. Public Participation of EIA Process on Case Studies

Case	Media for public announcement	Number of participants	Stakeholder	Major issues
S-1	Local newspaper	No mentioned	No mentioned	<ul style="list-style-type: none"> ▪ Hypothetical Significant bio-geo-physics impacts
S-2	Local newspaper	53 People	local government staffs, academics, Local leaders	<ul style="list-style-type: none"> ▪ Hypothetical Significant bio-geo-physics impacts ▪ Labor provision
S-3	Local newspaper	50 people	Local government staffs, academics, Local leaders, NGO	<ul style="list-style-type: none"> ▪ Job provision for local people ▪ Foreign workers ▪ Indigenous people relocation
S-4	Local newspaper	33 people	Local government staffs, academics, Local leaders,	<ul style="list-style-type: none"> ▪ Hypothetical Significant bio-geo-physics impacts ▪ Labor provision
S-5	<ul style="list-style-type: none"> ▪ Newspaper ▪ banner 	40 people	Local government staffs, academics, Local leaders, medical staff, police, army	<ul style="list-style-type: none"> ▪ Hypothetical Significant bio-geo-physics impacts ▪ Labor provision



Figure 1. EIA's Public Consultation in Indonesia

Ideally, public participation and consultation are an arena of ideas and comments by experts and involve the public openly. However public participation in developing countries is also characterized by pseudo-participation and selective involvement rather than broad participation (Marzuki 2009). Moreover, public participation is often treated as a procedural exercise instead of a living process (Nadeem and Fischer 2011). Thus, more than different methods and information disclosure are implemented, the higher the quality of performance in public participation appears to be the methods of achieving public participation and public information accessibility are the key factors in enhancing the development of quality in public

participation processes (K. Suwanteep, T. Murayama & S. Nishikizawa; 2017).

Related to the implementation OSS system, we argue that it would potentially diminish the role of public participation and consultation in Indonesia's EIA processes. When this situation happens it will worsen the quality of public participation which has also been problematic.

c. Monitoring

Indonesia has a specific monitoring guideline in MoE Regulation No 16/2012 that considers this particular type of action. Periodic monitoring of EIA execution should be carried out regularly between three to six months per year during pre-construction, construction, and post-operation of nickel smelters. During the monitoring process, the project owner should report the frequency of significant impacts of physical, biological, or socio-economic nature to the environmental agency of the government. If a company fails to carry out environmental monitoring, the MoEF is authorized to enlist an independent third party to undertake the audit.

All of the respondents from the local government said that monitoring data tends to merely fill the environmental agency's archives, as opposed to informing better decisions. The environmental permits are still just for administrative requirement purpose not as the control mechanism. Concerning of monitoring problem, mainly due to the lack of law enforcement, fewer capabilities, and competence of environmental authorities although by the law the authority of environment inspector is very powerful (result of interview with NG). In the interview, we found that environmental agencies have a limitation on a budget for monitoring activities as stated. When the agency found the law violation, they only could send the letter without proper sanction or binding force (result of interview with LG). The environmental permits are still just for administrative requirement purpose not as the control mechanism.

d. Quality of environmental impact statements

The quality of an environmental impact statement has consequences for the decision-making process and is one of the key factors contributing to an effective EIA (I. Pölönen et al. 2011). In the Indonesia EIA system, quality control of assessments is a duty of the EIA assessment commission in a provincial and national government. Assessment of EIS quality in Indonesia under National EIA assessment commission authority can be seen in **Figure 1**. According to the interview result, Indonesia has a problem with scientific databases retaining and storing data in an accessible form (per the of interviews with respondents NG₍₁₎, LG₍₁₎, LG₍₃₎, LG₍₄₎, LG₍₅₎, and LG₍₆₎). The lack of data also constrains the application of predictive quantitative models as core valuation techniques. At the heart of EIAs is a prediction of the likely environmental outcomes if the project proceeds. In practice, as mentioned by respondents NG₍₁₎ and LG₍₆₎, copy and pasting of the previous report was common. The project proponent's reasons were the matter of the cost to conduct a detailed study, limited time, and lack of expertise.

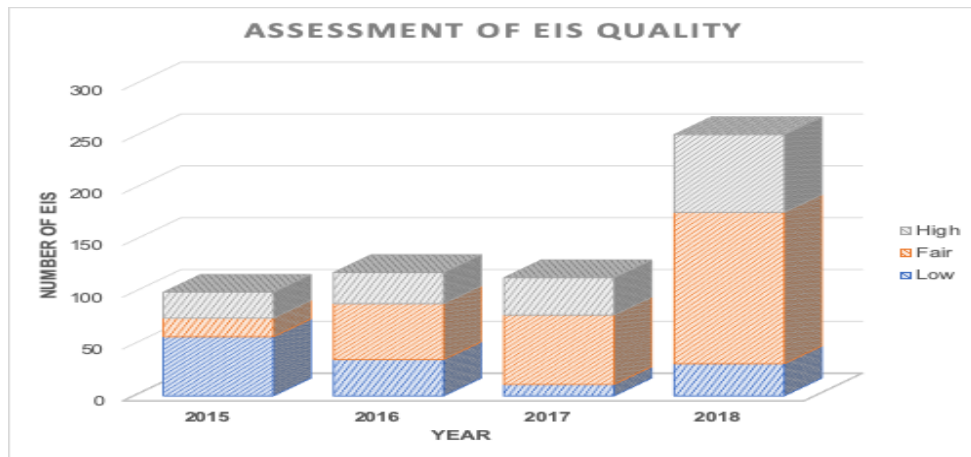


Figure 2. Assessment of EIS Quality Under National Government Authority
Source: MoEF (2018)

e. Human Resources

Simplifying EIA procedures eliminate the role of environmental staff and agencies responsible drastically for environmental licensing, further declining the quality of EIA studies. The environmental permits with OSS system require reliable and professional human resources and institutions, which have the competence to understand and operate IT equipment properly. Therefore, capacity building of the parties related to the environmental impact assessment system must be continuously carried out so that the relevant parties can adapt and apply the new system related to business licensing procedures and management and the use of information technology systems through the OSS system effectively and efficiently.

In general, Indonesia also facing the problem of limited capacity or experts for review of EIA reports. The number of environmental inspection officers is limited and could not cover all areas in Indonesia. Another problem is about the capability of an investigator is needed to be improved by technical training and improving educational aspects. In 2018, there were 33 provinces (97.06%) that already had an EIA Assessment Commission. Of the 514 districts, there were 255 districts (49.61%), which has licensed the Audit EIA Commission and there were 264 District (51.36%) who do not have a license Audit Commission of the EIA (MoEF, 2018).

5. Conclusions and Recommendations

Indonesia is one of the biggest developing countries that have a long experience in EIA policy and implementation. Despite Indonesia has comprehensive EIA policy framework, the law enforcement effort is still lacking achieve the expected goals. Streamlining permit system simplify the procedure, but need to synchronize with other regulations. Quality of Indonesia's EIS is gradually improving. The government supposed to develop scientific database and storing system. In the staging of public participation associated with ineffective decision-making processes and pseudo-participation. The OSS system require environmental agency staffs who have capability for operating Information Technology system. Monitoring activity become the major problem in Indonesia, when the government want to maintain sustainability.

To achieve the environmental permit target, we suggest some recommendations actions as explained as follows. In terms of EIA regulation, we suggest that any changes in environmental permit policy or guideline should be built upon comprehensive evaluation on

legal aspect and synchronize others regulation across the country, rather than be driven by the need to bureaucratic reform. Regarding the reporting aspect, the environmental agency should revise reporting guidelines and diminish unrelated sections of the EIS. The effectiveness of the public participation in Indonesia EIA system is yet to be improved. Governmental agencies, in tandem with project proponents, need to take innovative action for translating and spreading the information of the project plan through compatible and accessible media for the entire local community. Moreover, the public needs education on environmental topics to increase their knowledge and awareness. To overcome a discrepancy on monitoring activities this problem, Indonesia should continuously develop the capacity and capability of inspection staff, provide sufficient funds, and a strong commitment to sustainable environmental policy

References

- Bitondo, D., Post, R., van Boven, R. 2014. Evolution of EIA Systems in Central Africa. Secretariat for the Environmental Assessment in Central Africa, Yaoundé.
- Coordinating Ministry For Economic Affairs (CMEA) Republic of Indonesia. 2018. Guidelines of Business Licensing Through Online Single Submission (OSS) for Businesses Version 1.5
- Ministry of Environment and Forestry. Directorate for Prevention of Environmental Impact of Business and Activities. 2018. Government Agency Performance Accountability Report. Jakarta
- I Pölönen, Pekka Hokkanen , Kimmo Jalava. 2011. The effectiveness of the Finnish EIA system What works, what doesn't, and what could be improved. *Environmental Impact Assessment Review* 31 (2011) 120–128
- Kultip Suwanteep, T. Murayama & S. Nishikizawa 2017. The Quality on Public Participation in Environmental Impact Assessment (EIA) Reports in Thailand. *Journal of Environmental Assessment Policy and Management* Vol. 19, No. 2 (June 2017) 1750008 (21 pages) World Scientific Publishing Europe Ltd.
- Marzuki, A. 2009. A review on public participation in environmental impact assessment in Malaysia. *Theoretical and Empirical Researches in Urban Management* 3(12): 126–136.
- Morgan, Richard K., 2012. Environmental impact assessment: the state of the art. *Impact Assessment Project Appraisal*. 30 (1), 5–14.
- Nadeem, O and Thomas B. Fischer. 2011. An evaluation framework for effective public participation in EIA in Pakistan. *Environmental Impact Assessment Review* 31 (2011) 36–47.
- Purnama. D., 2003. Reform of the EIA process in Indonesia: Improving The Role of Public Involvement. *Environmental Impact Assessment Review* 23 (2003) 415–439
- T. Gore, T B. Fischer. 2014. Uncovering the factors that can support and impede post-disaster EIA practice in developing countries: The case of Aceh Province, Indonesia. Elsevier *Environmental Impact Assessment Review* 44 (2014) 67–75
- United States Agency for International Development, the United States Government, the Enforcement Network. 2008. Environmental Compliance and Enforcement in Indonesia Rapid Assessment