EIA in developing countries: How does environmental impact assessment (EIA)/(AMDAL) support neoliberal mining? (a case study in Indonesia)

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Abstract. Amdal regulation on mining exploitation according to Law No. 32 of 2009 aims to protect and manage the environment properly. This research reveals the paradox of EIA at the micro level (a case study) supporting the neoliberal agenda and facilitating economic development. This study aimed to explore how the practice of compensation for agricultural land at the scoping stage in the preparation of mining Amdal documents. The research was conducted in Mulawarman village, Kutai Kartanagara district, East Kalimantan province in the period 2004-2013. Historically, in the 2004-2013 period, Kutai Kartanega Regency was the most massive in issuing mining business permits in Indonesia. The results of the study indicate that there was weak legal protection for agricultural land owners and unequal negotiation practices between companies and land owners without government supervision. The practice of compensation is a development tool rather than an environmental protection tool.

1. Introduction
EIA instruments have been used by many countries for more than 50 years. Indonesia has used EIA/AMDAL from Law no. 4 of 1982 to Law 32 of 2009. The effectiveness of Amdal in protecting the environment has been questioned and has been debated [1–6]. The fact that effectiveness is a plural concept and can be framed in a variety of ways makes the debate even more complicated [7,8]. At a basic level, Sadler [1] highlights the notion of procedural effectiveness (the degree to which the AMDAL process correctly follows the mandated steps), transactive effectiveness (the degree to which AMDAL provides cost efficiency), and substantive effectiveness (the degree to which the AMDAL delivers on stated objectives). The level of effectiveness of EIA is further clarified by Morrison-Saunders and Arts [9] as follows:

a. The meta-level corresponds to the concept and practice of AMDAL globally, examines whether it is a fruitful process, and asks the question: “did AMDAL work?”

b. Macro-level following the AMDAL system in a particular jurisdiction, examining the influence of the process, inter alia, on decision-making and its efficiency; and

c. The micro-level corresponds to individual project case studies and relates to specific steps in the process. “The key question is: are the project and the affected environment managed in an acceptable

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way?"

Alan Bond et al. [10] examined the effectiveness of EIA at the meta-level. Using a Neo-Gramscian perspective, they find 6 narratives of 'passive revolution' that are used as a strategy to maintain conceptual uncertainty, thereby reinforcing the political nature of the AMDAL system, the effect of which is in favor of neoliberal hegemony. One of the narratives is land privatization at the meta-level. Compensation for land in Amdal is more important than protecting biodiversity or agricultural land. This study examines micro-level land privatization in the practice of compensation during the preconstruction of the coal mining Amdal. The case of Mulawarman village Tenggarong Seberang subdistrict Kutai Kartanegara district (Figure 1) was chosen to explain the practice of compensation by two coal mining companies, PT Kayan Putra Utama Coal (KPUC) and PT Jembayan (Figure 2).

2. Research methods
This study focused on the community as the target of compensation for agricultural land by PT JMB and KPUC. The location and object of the research were chosen with the consideration that this village is a granary village in East Kalimantan province and has been turned into a coal mine granary since 2003 [11].

This study used a qualitative method that focused on investigating the subjective desires, motivations, and experiences of people in dealing with land compensation. According to Daymon and Immy [12], qualitative methods are more likely to be subjectively connected with social reality, so this method is able to create understanding from the agent's perspective.

The sources of primary data for qualitative research are words and actions of key informants chosen through purposive sampling, the rest was secondary data including documents and others [13]. Data collection techniques are in-depth interviews, observation, and document analysis. The analysis process was carried out using an interactive analysis model according to Mile and Huberman [14], namely data reduction, data presentation, and data verification.

3. Results and discussion
Neoliberalism is a theory that proposes advancing human well-being through entrepreneurial freedom within an 'institutional framework characterized by strong property rights, free markets, and free trade [15]. The main features of neoliberalism include the advantages of economic growth, the importance of free trade to stimulate growth, promotion of unrestricted free markets, individual choice, privatization of business, reduction of government regulation, and advocacy of models of social evolution. Development is based on western experience and applies to the whole world [16]. One of the most important components of neoliberalism in developing countries is the promotion of foreign direct investment. Investment is considered capital to developing countries [17]. According to Bebbington et al. [18], the World Bank has encouraged foreign direct investment as a development strategy and also specifically encouraged foreign direct investment in the mining sector.

Kutai Kartanegara's economy relies on investment in the mining sector. Mining's contribution to gross regional domestic product (GRDP) averaged 78.8% in 2011-2015 [19]. Coal Mining Business Permits (IUP) of East Kalimantan Province was 40% of the total 2,870 national permits. Of the 1,143 IUPs, 54% or 625 IUPs were issued by Kutai Kartanegara [20]. This development option has risks such as the conversion of agricultural land into mining granaries. Although Law 32 of 2009 concerning environmental permits requires EIA as a condition for mining permits, massive mining investment and the practice of coal mining Amdal encourages land compensation as a privatization practice. Mulawarman Village has an area of 1000Ha2, 526Ha2 is a rice field area. After mining in 2003, the remaining village area is 80Ha2, 12Ha2 is rice field area and 68Ha2 is a residential area.

Based on the mitigation hierarchy developed by CEQ [21], biodiversity protection for a project is carried out through the following stages:

a. Avoiding the impact altogether by not taking a certain action or part of an action;
b. Minimizing impact by limiting the degree or magnitude of actions and their implementation;
c. Improving the impact by repairing, rehabilitating, or restoring the affected environment;
d. Reduce or eliminate impact over time by preservation and maintenance operations over the life of the action; and

e. Compensate for impacts by replacing or substituting resources or the environment.

The CEQ places compensation as a last resort and as an effort to counter development that results in loss of biodiversity. However, in the case of coal mining in Mulawarman, compensation is the main option for the loss of biodiversity or agricultural land. This study found some of the main conditions for the privatization of agricultural land in the village.

![Figure 1. Bird view coal mining on Mulawarman Village](source)

![Figure 2. Coal mining map on Mulawarman Village](source)

### 3.1. Weak legal protection of agricultural land

Mulawarman village has been a transmigration village since 1981. A total of 263 families received 2Ha2 plus residential area. The Mulawarman community encounters land ownership problems. Government Regulation No. 24/1997 regarding land ownership must be proven with a land certificate. Cultivated land by residents of Mulawarman since 1981 without a certificate. The use of cultivated land is limited by the regulation. Conflicts over land ownership of residents with other residents began to occur. Cultivated land without this certificate is claimed by indigenous tribes for sale (According to information from Mr. Tamsir, Chairman of Gapoktan) [22].

Law Number 41 of 2009 concerning the Protection of Sustainable Food Agricultural Land. Require the government and local governments to protect sustainable food agricultural land. According to Budiman et al. [23], local governments do not perform this function optimally. According to Subekti et al. [24], the increase in land-use change from year to year is due to the disapproval of the regional spatial plan (RTRW) and zoning of the Kutai Kartanegara Regency Government. The ratification of the document was hampered because the province of East Kalimantan did not have RTRW and zoning regulations at that time.

### 3.2. Unbalanced negotiations without government oversight

The Minister of the Environment No. 16 of 12 concerning guidelines for the preparation of Amdal submits the process of providing compensation through negotiations between the two parties. The negotiations are very good but need supervision from the government because the position of the two parties is not the same in terms of economic and political capabilities. The use of money, third parties/community organizations, and local elites from the village government supported the successful negotiation of the privatization of agricultural land in Mulawarman village.

The compensation for the residents’ agricultural land was valued at a fantastic amount, which was around 500-600 million rupiah for each hectare. The company wooed the people by bringing cash door-to-door. Many residents were tempted by cash at that time (According to Mr. Rijo, a transmigrant from Central Java). Furthermore, the Mulawarman community was often involved in conflicts with local tribal community organizations that defended the interests of the company, one of which was in 2014 [11]. Cases of land grabbing between residents and companies are always faced with these organizations.
The company's presence to compensate for land losses was not easy in 2001. According to a study by Sidik [22], the company approached village elites and convinced farmers to sell their land to the company. The company compensated the village head every month at that time. The company also approached community leaders and some security staff to reassure the rest of the community. The community was persuaded to sell their land and the compensation obtained was used to go on a Hajj or buy a new vehicle.

4. Conclusion
The effectiveness of the EIA/Amdal instrument in protecting the interests of the environment is believed by many parties. This study confirms that there is a paradox of EIA/Amdal. This case shows the neoliberal narrative of coal mining through the privatization of agricultural land. In the case of Mulawarman, the Amdal became a way of privatizing agricultural land and eliminating agrarian villages. The practice of land compensation in the pre-construction Amdal is more important than providing alternative solutions to protect agrarian villages. This phenomenon occurs because the function of protecting agricultural land by the government and the local government of Kutai Kartanegara has not been optimal, leading to politically and economically unbalanced negotiations between mining companies and the community. The use of cash, third parties/community organizations, and local elites from the village government were very successful in the negotiation process for compensation for land in Mulawarman village.

References
[1] Sadler B 1996 International Study of the Effectiveness of Environmental Assessment Final Report - Environmental Assessment in a Changing World: Evaluating Practice to Improve Performance (Ottawa: Minister of Supply and Services) p 248
[2] Lawrence D P 1997 Proj. Apprais. 12 219e232
[3] Cashmore M, Gwilliam R, Morgan R, Cobb D and Bond A 2004 Impact Assess. Proj. Apprais. 22 295e310
[4] Morgan R K 2006 Impact Assess. Proj. Apprais. 24 15e16
[5] Elling B 2009 Impact Assess. Proj. Apprais. 27 121e131
[6] Rozema J G and Bond A J 2015 Environ. Impact Assess. Rev. 50 66e73
[7] Bond A and Morrison-Saunders A 2013 Challenges in determining the effectiveness of sustainability assessment Sustainability Assessment: Pluralism, Practice and Progress ed A Bond, A Morrison-Saunders and R Howitt (London: Taylor and Francis) pp 37e50
[8] Pope J, Bond A, Cameron C, Retief F and Morrison-Saunders A 2018 Environ. Impact Assess. Rev. 70 34e44
[9] Morrison-Saunders A and Arts J 2004 Introduction to EIA follow-up Assessing Impact: Handbook of EIA and SEA Follow-Up ed A Morrison-Saunders and J Arts (London: Earthscan) pp 1e21
[10] Bond A, Pope J, Fundingsland M, Morrison-Saunders A, Retief F and Hauptfleisch M 2020 Journal of Cleaner Production 244 118694
[11] Prokaltim 2017 Tambang lenyapkan desa di Kukar, tiga ribu jiwa minta relokasi. Prokal.co 2017/04/19
[12] Daymon C and Immy H 2008 Qualitative Research Methods in Public Relations and Marketing Communications (Yogyakarta: Penerbit Bentang)
[13] Creswell J W 2006 Qualitative Inquiry and Research Design: Choosing among Five Approaches (California: Sage)
[14] Mile M B and Huberman A M 1992 Qualitative Data Analysis: A Sourcebook of New Methods (California: Sage)
[15] Harvey D 2005 A Brief History of Neoliberalism (Oxford: Oxford University Press)
[16] Tyner J A 2009 The Philippines: Mobilities, Identities, Globalization (London: Routledge)
[17] Peet R and Hartwick E 2009 *Theories of Development: Contentions, Arguments, Alternatives* (New York: Guildford Press)
[18] Bebbington A, Hinojosa I, Bebbington D H, Burneo M L and Warnaars X 2008 *Development and Change* 39 887–914
[19] Bappeda 2016 *Medium-term development plan document 2016* (Kutai Kartanegara: Bappeda Kutai Kartanegara)
[20] Antara Kaltim 2017 Kutai Kartanegara Miliki Izin Pertambangan Terbanyak Kaltim.antaranews.com 2017/06/06
[21] Council on Environmental Quality (CEQ) Executive Office of the President 1978 *Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act.* (Washington DC: Council on Environmental Quality) 1500e1508
[22] Sidik A 2021 *eJournal Sosiatri-Sosiologi* 9 170–184
[23] Budiman, Jumansyah, Mulka S R and Santi R E 2019 *Kanal: Jurnal Ilmu Komunikasi* 8 27–35
[24] Subekti R, Karjoko L and Astuti W 2013 *Yustisia* 2 44–55