

LAPORAN AKHIR
PENELITIAN UNGGULAN PERGURUAN TINGGI (P)



Implementasi Kebijakan Pengusahaan Bahan Energi

(Studi Dampak Kebijakan Pertambangan Batu Bara

Di Kabupaten Kutai Timur)

Tahun Ke Satu dari Rencana Dua Tahun

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RINGKASAN

UUD 1945 menetapkan bahwa bumi dan seisinya dikuasai negara dan digunakan sepenuhnya untuk kemakmuran rakyat. Namun demikian penerapan konstitusi tersebut belum sepenuhnya berhasil. Hal ini terlihat dari belum adanya korelasi antara wilayah kaya sumber daya alam dan tingkat kemakmuran penduduknya. Fenomena semacam ini yang dikenal sebagai 'kutukan sumber daya alam' (William, 2011). Isu ini menjadi lebih besar ketika terjadi politik pembaruan terhadap eksploitasi alam yang merusak lingkungan dan tidak berpihak kepada rakyat kecil (Erwiza, 2007). Terkait dengan hal tersebut, penelitian ini bertujuan memeriksa kebijakan yang ada di Kabupaten Kutai Timur, sebagai wilayah yang kaya sumber batubara, dan mengukur dampak aktivitas penambangan terhadap lingkungan dan masyarakat lokal.

Penelitian ini merupakan penelitian kualitatif yang terdiri dari: 1) analisis sosial ekonomi dari Kabupaten Kutai Timur (didasarkan pada analisis PDRB dan *shift-share*) dan penduduk (didasarkan pada wawancara dengan masyarakat lokal). Menggunakan pendekatan Isaac dan Michael, diambil 100 responden/sampel warga secara *purposive*; 2) analisis dampak lingkungan. Analisis dibatasi pada dampak terhadap lingkungan air dan tanah, sampel air dan tanah diambil untuk dilakukan tes kualitas di laboratorium; 3) analisis AHP menggunakan *expert choice* untuk menetapkan prioritas tindakan yang diperlukan. Enam ahli yang dilibatkan terdiri dari unsur akademik, pemerintah, dan lembaga independen/LSM. Model ini dipilih karena cukup valid untuk mencari hirarki dari banyak kriteria yang kompleks (Saaty, 1993); 4) *Content analysis* (Pal, 1987) digunakan untuk memeriksa komitmen pemerintah daerah dalam menyelamatkan lingkungan dalam kegiatan penambangan yang dilakukan. Dokumen yang dievaluasi adalah RPJMD dan RTRW.

Survey sosial ekonomi menggaris bawahi bahwa ternyata 40% penduduk lokal tidak merasa ada perubahan ekonomi dengan keberadaan perusahaan tambang batubara di lokasi berdekatan dengan permukiman mereka. Namun demikian hasil regresi berganda menyatakan bahwa tingkat perekonomian mereka bisa meningkat, dengan keberadaan perusahaan tambang batu bara, bila terjadi perubahan pada beberapa variabel yaitu, adanya peluang mendirikan usaha, terdapatnya kegiatan-kegiatan sosial di lingkungan masyarakat, dan keaktifan masyarakat dalam kegiatan sosial.

Dari hasil uji laboratorium, kualitas tanah dan air telah mengalami penurunan sehingga dapat dikatakan telah terjadi pencemaran air dan tanah pada kawasan sekitar pertambangan batu bara.

Berdasarkan dari hasil analisis AHP menggunakan *software expert choice* dari enam alternatif terpilih dua alternatif yaitu pengontrolan dan pemeriksaan kualitas air secara berkala dan reklamasi dan revegetasi lahan bekas penambangan batubara. Sedangkan berdasarkan hasil survei ekonomi penduduk sekitar pertambangan sementara menunjukkan penduduk di Kecamatan Sangatta Utara memiliki tingkat ekonomi yang baik tanpa melihat naik turunnya harga batubara yang sempat merosot. Adanya pertambangan batubara juga meningkatkan ekonomi penduduk disekitar pertambangan (60% responden).

Dari content analisis didapatkan bahwa terdapat inkonsistensi kebijakan antara kebijakan pembangunan dan kebijakan penataan ruang. Dua dokumen utama yang dianalisis menyebutkan bahwa dokumen RPJMD telah secara eksplisit menyebutkan tindakan yang perlu dilakukan sesuai dengan hasil penjarangan pendapat para pakar (expert choice), namun demikian pada level perencanaan ruang wilayah, apa yang digariskan oleh RPJMD belum terwadahi dalam RTRW (2 dari 3 unsur belum tertuang dalam kebijakan ruang).

SUMMARY

The constitution of Indonesia aims to guarantee that natural resources are exploited for the benefit of the people. The implementation, however, is not satisfying in terms of social and environmental impact on the community. Empirical evidence shows that there is no significant correlation between the level of natural resource capital and the level of people's prosperity. This condition is called 'resource curse' phenomenon (William, 2011). This issue becomes more critical since the condition in developing countries, including Indonesia, indicates political ignorance (Erwiza, 2007). This research was conducted to observe the existing policies in the resource rich region (East Kutai Regency in East Kalimantan Province) and to evaluate the extent the 'resource curse' has impacted on local community and environment.

The research was a qualitative study that comprised of: 1) Social economic analysis of the region (based on GDRP and Shift-share analyses) and the community (based on interview with local population). Using Issac and Michael's approach, it took 100 samples/respondents, the selection of respondents was purposive; 2) Environmental impact analysis. The analysis was focused on the quality of surface water and soil, samples were taken for laboratory test in accredited local laboratories; 3) Expert choice (analysis hierarchy process). Six experts were involved in the research comprising two experts from academic institution, 2 experts from government institutions and 2 experts from independent institutions. This decision support model was good in analyzing complex multi criteria to become a hierarchy (Saaty, 1993). Priorities of actions were generated for environment improvement, and 4) Content analysis (Pal, 1987) was used to examine the commitment of local and provincial governments in saving the environment while extracting natural resource in their administrative regions. Documents were evaluated in terms of their availability, reproducibility, and accuracy.

The Social economy survey on the study area underlined that 40% of local community did not feel any contribution of mining company to their economy/income, however regression analysis showed that their income could increase, with the existence of mining company, if several variables are modified. Those variables are: business opportunity, social activity, and community participation.

The examination of impacts of mining activities on the environment, which were measured on the quality of surface water and soil, proved that mining had degraded environmental quality in the surrounding area. Therefore, some actions, resulted from hierarchy process analysis, are required. They are reclamation/ land recovery including top soil recovery, reforestation/replanting, and periodical monitoring on water and soil quality (pollution control).

Content analysis found that there was inconsistency of development policies between development planning and spatial planning. Two main documents that were analyzed showed that policies in the development planning were not accommodated (two of three aspects) in the spatial planning. Therefore, new commitment should be established at the local level with more detailed action planning and spatial planning to sustain the local development in this resource rich region.

Central Productive Policy in Natural Resource Rich Region: The Case of Coal Mining in East Kalimantan– Indonesia

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Abstract

It is necessary to safeguard resource rich regions from the so-called resource curse phenomenon occurred in many African countries. East Kalimantan is a resource rich province in Indonesia which has abundant natural resource. The research was focused on the new regency in East Kalimantan, the Regency of East Kutai. Coal mining is the primate sector in the regency, which contributed more than 80% to local GDP. Several issues raised from the activities of coal mining were observed. Economic benefits and impacts on the economy of local government and local community were evaluated by examining local economic growth and community's income. Secondary and primary survey were conducted to support the analysis. The following step was evaluating the impacts on the environment (based on water and soil quality), formulating priority strategies through analysis hierarchy process (AHP) and examining the commitment of local government by content analysis of development and spatial planning. The finding shows that coal mining definitely improved local GDP, however, the impact on local community was relative. The environment (tested on water and soil quality) was degraded and, therefore, several actions are needed to prevent worse impacts. These actions should be supported by commitment of local government that must be explicitly stated in the legal documents.

Abstrak

Merupakan suatu keniscayaan untuk melindungi kawasan kaya sumber daya alam Indonesia dari fenomena 'kutukan sumber daya alam' sebagaimana banyak terjadi di negara-negara Afrika. Dalam upaya tersebut, penelitian ini mengambil kasus Kabupaten Kutai Timur yang merupakan pemekaran kabupaten baru di Kalimantan Timur yang merupakan provinsi yang kaya sumber daya alam. Pertambangan batu bara merupakan sektor primer di Kabupaten Kutai Timur yang mampu memberikan kontribusi di atas 80% per tahun dilihat dari PDRB Kabupaten. Beberapa isu yang muncul dari kegiatan pertambangan batu bara diukur dalam penelitian ini. Survey primer dan sekunder dilakukan untuk, antara lain, melihat keuntungan dan dampak ekonomi dari pertambangan terhadap ekonomi wilayah dan ekonomi masyarakat lokal dievaluasi. Langkah berikutnya adalah: mengukur dampak terhadap lingkungan (dibatasi pada kualitas tanah dan air permukaan); merumuskan prioritas strategi yang tepat melalui analisis AHP; dan terakhir adalah mengukur komitmen pemerintah daerah melalui analisis konten dokumen utama perencanaan pembangunan dan ruang wilayah. Temuan penelitian membuktikan bahwa pertambangan telah meningkatkan PDRB, namun demikian dampaknya terhadap ekonomi masyarakat lokal masih relatif. Lingkungan air dan tanah menunjukkan indikasi terdegradasi. Oleh karena itu beberapa langkah aksi perlu dilakukan untuk mencegah dampak yang lebih buruk ke depannya. Langkah aksi tersebut haruslah didukung oleh komitmen pemerintah daerah yang seharusnya secara eksplisit tertuang dalam dokumen yang memiliki kekuatan hukum (law enforcement).

Introduction

Constitution of Indonesia chapter 33 states that natural resources are owned and managed by the State. The constitution aims to guarantee that natural resources are exploited for the sake of the people. The implementation, however, is not satisfying in terms of social and environmental impact on the community. Empirical evidence shows that there is no significant correlation between natural resource rich regions in Indonesia and social-economic and

Curse Productive Policy in Natural Resource Rich Region: The Case of Coal Mining in East Kalimantan– Indonesia

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Introduction

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environmental development level of the region. This condition exemplifies the so-called 'resource curse' phenomenon (William, 2011) where recent literature undertakes policy research related to this phenomenon, such as Scmueli, Kaufman & Connie (2008), Jonsson & (2009), and Ayee et.al. (2011) who focused their research on political aspects, then Matthews, K., & Paterson, M., (2005), Hu et.al (2010) and Bai et.al (2011) addressed environmental and ecological aspect while Veiga et.al (2001), Everingham (2007), and Kilian (2008) investigated social and economic aspects of mining activities.

These authors agreed that capital-industry's policies on natural resources had driven environmental degradation while capital industry's activities, in developed countries, can be compromised through 'carbon trade-off' protokol. More serious problems occurred in developing countries (Indonesia) where the state indicates political ignorance on the social-environmental impacts of natural resource exploitation (Erwiza, 2007). Most of those studies agree that the 'ignorance' was guided by free market mechanism. Economists have developed elasticity models related to energy demand and energy unit price, however income distribution, financial capital, and mostly ecology were less considered.

Indonesia is a potential country in terms of its natural resource reserve. The extraction of its natural resources, so far, has not been able to significantly provide prosperity to local people. Resource rich provinces in Kalimantan and Papua are interesting to be observed associated with their performance in social and environmental development resulted from the extraction of their natural resources. This paper aims to explore this phenomenon by taking a case of coal mining region in East Kutai Regency, East Kalimantan Province. Mining sector contributed 83.43% of regional economy (gross regional domestic product) in 2012. Since 2007 the contribution has been constantly over 80%. However, there is a question related to the extent extractive industries in this province has improved the quality of community's life and environment. The research was conducted to observe the existing policies in this resource rich region and to evaluate the extent the 'resource curse' has impacted on local community and environment.

Methods

The research was located in Sangatta Utara District where coal mining is operated by PT KPC (coal industry enterprise in East kutai Regency). The research was a qualitative study that comprised of: 1) Social economic analysis of the region (based on GDRP and Shift-share analyses) and the community (based on interview with local population). Using Issac and Michael's approach, it took 100 samples/respondents, the selection of respondents was purposive; 2) Environmental impact analysis. The analysis was focused on the quality of surface water and soil, samples were taken for laboratory test in accredited local laboratories; 3) Expert choice (analysis hierarchy process). Six experts were involved in the research comprising two experts from academic institution, 2 experts from government institutions and 2 experts from independent institutions. This decision support model was good in analyzing complex multi criteria to become a hierarchy (Saaty, 1993). Priorities of actions were generated for environment improvement, and 4) Content analysis (Pal, 1987) was used to examine the commitment of local and provincial governments in saving the environment while extracting natural resource in their administrative regions. Documents were evaluated in terms of their availability, reproducibility, and accuracy.

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