3rd International Conference on Social Transformation, Community, and Sustainable Development (ICSTCSD 2019)

The Impact of Coal Mining on Environmentally Sustainable Development

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Keywords: decentralization, coal mining, environmental degradation.

Abstract: This study identifies an environmentally sustainable development in the Kutai Kartanegara Regency in the

province of East Kalimantan. Kutai Kartanegara is a regency with a significant economic growth since the decentralisation of permit authorization in the mineral sector in Indonesia. The analytical descriptive research method is done by using secondary data through literature review. The result of this research concludes that the local government of Kutai Kartanegara regency in increasing the economic growth based on extractive industry views natural resources as source of revenue instead of source of livelihoods and consequently caused environmental degradation. The practice of EIA is limited and viewed as merely a

requirement for mining permits and thus failed to prevent environmental degradation.

1 INTRODUCTION

Decentralization policy in Indonesia post-reform through Law 22 of 1999, amendment to Law 32 of 2004, and finally Law 23 of 2014 gives broad authority to autonomous regions. This authority is often interpreted as a change in geopolitical status, namely the demolition of the inheritance territorial boundaries than in what is considered to be a form of injustice towards the process of realization in the form of claiming new territorial boundaries along with natural resources in them which are considered to contain more justice.

The authority of coal adultery is owned by the Kutai Kartanegara district since the enactment of Law 22 of 1999 to 2014. Since then, many coal mining licenses have been issued by the district government in the form of mining business licenses (IUP). The report of the mining advocacy network (JATAM) stated that the coal mining permit area reached 1.10 hectares or 40% of the area of Kutai Kartanegara district (www.jatam.org, in title "siapa penguasa tanah Kaltim?" 2019/03/14).

2 THEORETICAL

The existence of coal mining has so far provided good results for economic growth, both in the area around mining and in the regions, as is the study conducted by Kitula (2005), Raden et al (2010), Salim (2012), Apriyanto.D & Harini R (2013), Nurmansyah (2013) Irawan (2015) Suharto, et al (2015). While lately a number of cases of environmental damage have been affected due to the presence of coal mining activities, the phenomenon of environmental damage needs more contextual analysis, especially the way of view of development and local government applying the principles of good environmental governance.

3 METHOD

This study uses descriptive exploratory. exploratory research aims to find something new in the form of grouping a particular phenomenon or fact. Descriptive research carried out by analyzing and presenting data systemically, so that it can be more easily understood and concluded. Data sources used are literature studies of several journals, scientific works, newspapers and other sources which are then



analyzed by researcher. This research use the economic exploitation index (Mubyarto, 2005: 174), and the principle of good environmental governance (Sentosa 2001) to analyze The perspective of development policy based on extractive industry and implementation of principles good environmental governance in the era of decentralization extractive industry.

4 RESULT AND DISCUSSION

Developing countries, including Indonesia have a government perspective as a sovereign party or have an institution that has the authority to manage and use natural resources. The general assumption that natural resources are important capital for the implementation of national development with the orientation of increasing revenue and foreign exchange (state revenue) (Soekirno, 2006), this way of view requires freedom in exploiting natural resources owned, that development can only be done by utilizing natural resources, in practice they do everything in their sovereignty on the basis of the right to build in order to catch up and even ignore environmental issues such as pollution and environmental destruction. The method of the field was then passed on by the regional government through the authority of decentralization of natural resource management, in addition to the issue of the way of view of development, implementing decentralization also brought the political dynamics of local government governance in realizing the principle of good governance. This principle is so important in sustainable development and taking into account Good Environmental Governance. The two themes will be discussed to see the impact on many cases of environmental degradation in the East Kalimantan province of Kutai Kartanegara

4.1 The perspective of development policy and its impact on Kutai Kartanegara

The Province of East Kalimantan is included in the national policy of the Master Plan for Acceleration and Expansion of Indonesia's Economic Development (MP3EI) 2011-2025/ with the theme of development as "Center for Production and Processing of the National Mining and Energy Reserves". Kalimantan Island has 50% of coal resources in Indonesia, East Kalimantan Province has 72.2% of the coal resources of Kalimantan Island (Doc. MP3EI 2011-2025 page: 101), East Kalimantan is the most massive region in issuing mining business licenses (IUPs), namely 1,143 or

40% of the total national permit 2,870. Of the 1,143 IUPs in the East Kalimantan province of Kutai Kartanegara district, they have 625 IUPs or 54% (Kaltim.antarnew.com in title "Kutai Kartanegara Miliki Izin Pertambangan Terbanyak 2017/06/06). The amount of coal production from East Kalimantan in 2017 was 82.87 million tons with the Kutai Kartanegara Regency as the largest producer of 65.11 million tons (Katadata.co.id in title "Emas Hitam Mahakam dalam Bidikan KPK" 2019/02/11).

In the medium-term development plan document (RPJMD 2016-2021) the revenue of the government of Kutai Kartanegara district still relies on profit sharing in the natural resources sector. Mining contributions for gross regional domestic product (GRDP) throughout 2011-2015 averaged 78.8%. The Kutai Kartenegara district government believes that by increasing coal production it can increase income and economic growth, this perspective is intended to obtain income to finance a number of development projects. Unfortunately, natural wealth has not been able to improve people's welfare, as reflected in the economic exploitation index that remained high during 2015-2017 (see Table 3.1). This index shows "economic exploitation" by the government or investors, which is estimated by comparing GDP per capita with consumption expenditure per capita Mubyarto, 2005: 174 Kuncoro (2010). Based on the economic exploitation index in the last 3 years around 99. This means that every GRDP increases by 100, the proportion enjoyed by the people of Kutai Kartanegara Regency is only 1 percent. This also means that the income gap between rich and poor is very high, which results in a sense of social injustice and jealousy between communities.

Table 1. Income percapita, Consumption Percapita, index of economic exploitation Kutai Kartanegara regency2015-2017 in million rupiah.

Description	Income per capita		Consumpti	index of
	National	Kukar Non oiln gas	on Per capita	economic exploitation (%)
Years	Α	В	С	D=C/B
2015	45.1	82	0.98	99
2016	48	86	1.04	99
2017	51.9	103.2	1.12	99

Source: Adopted from 2018 Figures of BPS Kutai Kartanegara Regency



According to Kuncoro (2010) East Kalimantan is one of the provinces experiencing growth without development, the high index of economic exploitation has implications for social and environmental cases in Kutai Kartanegara district, some of which are:

- BPS East Kalimantan noted that the largest poor population was in Kutai Kartanegara district with 55,820 people or 26.21% of the total poor population of East Kalimantan in 2016 (Kaltim.prokal.co in title "TERNYATA...!! Kukar Sumbang Penduduk Miskin Terbesar di Kaltim" 2017/07/19);
- The East Kalimantan provincial health office in 2016 noted that Kutai Kartanegara was the largest contributor to the Maternal Mortality Rate (MMR) of 32 cases out of a total of 240 per 100 (Depkes.go.id in title:" Profil kesehatan Provinsi kalimantan timur 2017");
- The Regional Financial and Asset Management Agency (BPKAD) of the Kutai Kartanegara Regency recorded construction costs in 2017 for contractors reaching 245 billion (Kaltim.prokal.co in title: "WALAH..!!! Pemda Utang Ratusan Miliar" 2018/01/26);
- Mining advocacy network (Jatam) recorded that there were 1735 mine holes without reclamation and the largest 842 were in Kutai Kartanegara, the number of victims drowned in mine holes throughout 2011-2019 was 35 people, and 12 cases occurred in Kutai Kartanegara (www.viva.co.id in title:" Daftar 35 Korban Tewas Lubang Bekas Tambang di Kaltim" 2019/6/27);
- The National Disaster Management Agency (BNPB) said 16,385 people were affected by floods and landslides in Kutai Kartanegara District, which occurred during the week of June 5-11 2019 (news.okezone.com in title: "16.385 Warga Terdampak Banjir dan Longsor di Kutai Kartanegara 2019/06/12);
- Mine activities near settlements in loajanan sub-districts caused the national road connecting the city of Tenggarong-Balikpapan to landslides (www.korankaltim.com in title: "Empat Tahun Semenjak Longsor, Jalan Tenggarong-Loa Janan Belum Dapat Perhatian 2019/03/18), the public road connecting the Sanga-sanga and Muara jawa landslide sub-districts along with 11 houses of 41 souls displaced (www.niaga.asia in title: "JATAM Kaltim: Jauhkan Aktifitas Tambang dari Permukiman dan Jalan Umum" 2018/11/30);
- Mining activities in Mulawarman village, Kutai Kartanegara district by PT KPUC and JMB caused 3000 people to be relocated, the mining

activities removed water sources, and also resulted in the conversion of agricultural land from 526 hectares of rice fields remaining 12 hectares (Kaltim.prokal.co in title: "Tambang Lenyapkan Desa di Kukar, Tiga Ribu Jiwa Minta Relokasi" 2017/04/19).

The Ministry of Environment and Forestry (KLHK) study of the impact of mining activities in 2013 revealed that the losses suffered by mining in a number of regions reached thousands of trillions. Particularly for the Kutai Kartanegara (Kukar) Regency, East Kalimantan, the value of the loss reached IDR 581.43 trillion. The net present value (NPV) of natural capital in Kukar is greater, namely Rp. 990.19 trillion compared to the operational NPV, which is only Rp. 408.75 trillion. That means, there is a difference of minus hundreds trillion in Kukar which is considered as a big loss to the environment, the health of the surrounding community, and social and economic damage. Parameters used are community property tax rates, local economic development, health costs, reduction in agricultural productivity costs, pollution prevention costs, revegetation costs, and maintenance of public infrastructure. The study was conducted using three approaches, namely good mining governance, environmental management, and socioeconomic impact approaches

4.2 Weakness of pro-environmental governance Some findings of social and environmental cases cannot stand alone, the political dynamics of decentralization have an effect on local government governance in carrying out the principles of good governance which are the basis for environmental sustainability (good environmental governance). According to Sentosa (2001) there are several criteria that must be integrated in each policy related to the efforts of good environmental governance: Empowerment, community involvement and public to information; Transparency; access Decentralization that is democratic; Recognition of ecosystem and sustainable carrying capacity; Recognition of indigenous peoples and local communities; Consistency and harmonization; Clarity; and Power of enforcement (enforceability)

Some implementation of this principle is highlighted, in a number of dominant cases. As follows:

1. Lack of Empowerment, and community involvement and public access to information and transparency. The mining advocacy network (JATAM) filed a lawsuit against the mining and energy department and the regent of Kutai



Kartenagara district dated March 10, 2014 (See Kaltim.antaranews.com in title: "Jatam Kaltim Gugat Bupati dan Distamben Kukar" 2014/03/10) regarding requests for public information on mining business permits and utilization of APBD. This case went on for 18 months and was won by Jatam. They say "coal mining crimes start from information crimes or information that should be known to the public"

2. There is no acknowledgment of the carrying capacity of ecosystems and sustainability; It is seen that the way views in natural resource management are limited to economic commodities as described in 3.1.

3. Lack of enforcement (enforceability)

According to Macdonald, KF (2017) research results Government Regulation Number 78/2010 requires reclamation and post-mining no later than 30 days. In fact, for years and even until the operating license was exhausted, the company left the ex-mine so far, not a single mining company has been charged with death caused by a mine pit or due to failure to restore a mine pit, in a survey report by Dinas ESDM with Landsat images showing that there were 632 mine holes reported to have turned into giant puddles. 264 of these former mines (42%) located in Kutai Kartanegara title:" (newsmongbay.com Who owns in Indonesia's deadly abandoned coal mines? 2017/05/25). EIA as an instrument for preventing pollution and environmental destruction as Act 32 of 2009 has failed to be enforced to carry out its functions, the cause of which is that EIA is only limited to requirements formal issuance of mining permits. Every entrepreneur who applies for environmental permits and permits environmental impact analysis (EIA) at the Regional Environmental Agency of Kutai Kartanegara Regency is asked to pay Rp 60 million (nasional.kompas.com in title: "Pengusaha Diminta Rp 60 Juta Tiap Mengurus Izin Amdal di Kutai Kartanegara" 2018/03/07)

5. CONCLUSION

Natural resources are a source of livelihood that is entrusted to us by the next generation. A number of cases of environmental damage are highlighted in the coal mining business in Kutai Kartanegara Regency, since the implementation of decentralization the local government has a natural resource perspective as a source of income to catch up with development. This way of looking if it is not

followed by good governance practices that have environmental insight (good environmental governance) triggers various environmental degradation.

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