

Natural Resource Policy Through Capability Approach: Case of Coal Mining and Palm Oil Industry in Indonesia

Sunaryo^{1*}, Ika Karlina²

¹Department Philosophy and Religion Studies, Paramadina University, Indonesia

²Department of Communication Studies, Paramadina University, Indonesia

Abstract

This article can be seen as a 'moral' evaluation to the most important of natural resource sectors in Indonesia, namely the coal mining sector and palm oil plantations through the capability approach as formulated by Amartya Sen and Martha Nussbaum. These two sectors are important because they have a large contribution to state revenue, but unfortunately, at the same time, both also have a large contribution to the destruction of the environment, health and conflict in society, which are very important to support the quality of human life. Through this approach, I hold that for coal mining, even though it makes a large contribution to state revenue, the losses received related to the things that support the quality of human life are far greater. Therefore, for this sector, it is a good thing for the government to make a significant reduction by developing the mining process which is environmentally friendly and does not damage the quality of the healthy life of the people in the area. While the palm oil industry is basically not as bad as coal mining. But this industry has contributed to deforestation in Indonesia and damaged biodiversity. In this sector, the government also needs to look for the development of the palm oil plantation industry that is more environmentally friendly.

Keywords: *capability; quality of life; coal mining; palm oil industry.*



This is an open access article under the CC-BY-NC license.

INTRODUCTION

In many countries that are rich in natural resources, including Indonesia, the government tends to develop natural resource policies by selling natural resources in raw material form. This is the first thing that can be seen as a policy that does not provide maximum benefits for the country and its citizens. Another thing that is also often found in the development of natural resource policies is the lack of attention to the sustainability of the environment and life of local residents. What I want to emphasize in this article is that in the long-term, this model of natural resource policy will be very detrimental to three basic aspects, i.e. economic, ecological and socio-cultural.

The tendency of government or state to exploit natural resource and neglect the environmental issues is largely driven by short-term interests. In this case, the goal that is often wanted is the growth and direct income received by the state in the form of GDP. However, as I will argue in this article, this kind of policy should no longer be an option because the economic, ecological losses and social impacts borne by the community are not comparable to the benefits received in the short term.

Therefore, we need to consider natural resource development policies that produce maximum economic value, are environmentally friendly and also empower the community, especially those who live in the area of natural resource development. The approach that I propose in this article is popularly known as the capability approach. This approach was popularized by an economist and philosopher, Amartya Sen and Martha Nussbaum. In this article, I will begin with the concept of capability as written by Sen and Nussbaum. I will show the practice of natural resource policy and management in Indonesia.

*Corresponding author
sunaryo@paramadina.ac.id; ika.karlina@paramadina.ac.id
DOI: <https://doi.org/10.31098/ijmesh.v2i2.15>

LITERATURE REVIEW

Capability Approach

The concept of capability refers much to the works of Amartya Sen and Martha Nussbaum (A. Sen, 1985). According to them, the capability is understood as the ability to achieve something that is considered valuable (A. Sen, 2014) Nussbaum formulates capability in what people are actually able to do and to be (M. C. Nussbaum, 2011). In their view, this concept is far more essential for human life than material measures such as income. Capabilities become a measure to the quality of life (M. Nussbaum & Sen, 1993). Indeed, in economics, income is often used as a measure of success by both, individual and collective. Therefore, based on the economic perspective, per capita income is seen as a success measure for a country (Jean-Paul & Martine, 2018).

For Sen and Nussbaum, if we talk about the quality of life, income is clearly not the only measure. According to them, we must see a measure of the quality of life in people's capabilities. Through the capability approach, we can see essential aspects of human life more substantive, both personally and collectively.

In explaining the capability approach, Sen and Nussbaum start by identifying things that are considered valuable for human life. Broadly speaking, Sen refers to two things that are considered the most valuable for human life, first the agency and second the well-being (A. K. Sen, 2009). While Nussbaum then details it into ten central capabilities (M. C. Nussbaum, 2011).

For things that are considered valuable, the capability approach underlines how we are able to achieve them. For example, to the agency aspect that is very valuable for human life, we need to see how the people are able to realize their agency in their lives (A. Sen, 1985). As well, to the wellbeing aspect which almost all humans consider it as something important for their lives, we need to see how people are able to achieve wellbeing condition (A. Sen, 1992).

The capability approach wants to ensure that we can achieve aspects that we consider valuable to our lives. In this case, the role of government policy is one of the important factors to ensure that people have the capability of valuable lives. So according to Sen and Nussbaum, the idea proposed by the capability approach is far more comprehensive and substantive for human life. In other words, compared to income measure, the capability approach is far more representative in measuring the quality of life.

In assessing development policy, we are clearly not enough if we only see it through increasing income or economic growth. Through the capability approach, we are invited to see the success in enhancing capabilities possessed by people or the community. A policy will be considered successful if the community is increasingly able to realize their freedom and achieve welfare conditions that can make their lives more dignified.

Then, what does Sen mean by the agency here? He understands agency freedom as a condition by which people are able to realize their conception of a good life. It could be cultural, political or religious values. In other words, people who experience restraint in realizing their values of a good life are people who are in deprivation of capabilities.

Whereas what is meant by well-being is a condition in which people are able to live well, such as having adequate nutrition, health, ease of mobility, security, comfort, and others. With the capability approach, we need to see how people have the ability to access these welfare conditions.

The ability of the community to achieve a free and prosperous life is a measure in assessing the success of a country's development. So, when we develop policies related to natural resources, based on this approach, we need to see how people can have those capabilities. If the development of natural

resources can contribute to the improvement of capability, both in terms of the ability to realize freedom and prosperous life, we can judge that the policy has maximum positive impacts.

Some capabilities that can be specified and relevant in relation to natural resource policies are as follows:

1. In assessing what policies will be taken, we need to use criteria for economic benefits, the sustainability of the natural environment and the involvement of the surrounding community in a participatory manner. In this case, the government may not pursue economic benefits at the expense of the last two things. These three things must be in parallel into consideration of natural resource policies.
2. The involvement of the surrounding community and other public opinion related to the development of the natural resource industry is very important to avoid the occurrence of social conflict. The aspirations and values of life that they believe must be considered when the government will make a decision. The absence of aspiration space can have a negative impact on the social and cultural life of the surrounding community which is an important subject in development.

RESULTS AND DISCUSSION

Problems of Natural Resource: Case of Indonesia

So, what is the actual governance of natural resources that has been going now, especially in Indonesia? Firstly, we need to identify the types of natural resources that will be discussed in this article. Each type of natural resource has different characteristics so that it has different problems. The natural resources which will be discussed in this article are natural resources that are the highest source of the state's income, but at the same time also contribute to many problems for the environment and society.

Among natural resources that comply with these criteria are the coal and palm oil industry (Nugraha, 2016). Economically, the Indonesian government depends a lot on the product of these two resources. But at the same time, we can also see the ecological and social problems in the governance of these natural resources. We honestly admit that it is not easy to eliminate or reduce the problems that exist in this sector. The problems inside are too complex so it takes a lot of effort to rehabilitate them.

Coal Mining

Indonesia is one of the largest coal producers in the world and becomes the second-largest exporter after Australia (Workman, 2019). Coal mining is widely used to support electrical energy. Among countries that import coal from Indonesia are China and India. In the past five years, demand for coal production has declined. China, as one of the largest coals importing countries from Indonesia, reduces its coal imports from Indonesia because they have the policy to reduce coal use in the country (Sulmaihati, 2019). But in general, the amount of coal production in Indonesia is still relatively large. The contribution of minerals and coal to non-tax state income in 2017 is in the range of 40.6 trillion IDR. or 75 to 80 percent of the total of Indonesian non-tax state income (Bukit Asam, 2018).

But, as we can see and observe, the governance of coal mining in Indonesia is not categorized as good. Some of the problems that are often found in Indonesian coal governance are that the mining is not in accordance with regulations, damages environment, leaves ex-mining holes without attempting to reclaim them again. We also often find mining activities without permission from authority (Kompas, 2018).

In the Kompas note, as of September 2018, there were 633 mining activities, out of a total of 2.389 Mining Business Permits (Izin Usaha Penambangan) were problematic and not in accordance with the regulations. Those mining activities could be categorized as no clear and clean. They are not in accordance with regulations and not environmentally friendly (Kompas, 2018). This amount is of course very large because there is around 26 percent of mining activities that have serious problems.

To the environment, coal mining contributes greatly to the destruction and to downgrade the quality of the surrounding environment. Waste, dust, and ex-hole of mining are among the negative impacts of coal mining on the environment. Besides the regulatory and environmental aspects, coal mining also has many social problems. Among the social problems often caused by coal mining activities are eviction, land grabbing and violence against the community in the area of mining activities (Kompas, 2018).

In the phase of coal mining permits, the Indonesian Corruption Eradication Commission (Komisi Pemberantasan Korupsi) also found many corrupting processes. In KPK's records, there are many corruption and bribery practices that occur in the coal mining sector. The most common are non-compliance with taxes, lack of payment of guarantees of reclamation to allegations of manipulation of coal trade figures (Kompas, 2018).

The autonomy policy in Indonesia contributes to increasing mining permits in many regions. Since autonomy policy, mining permits were issued by the local government so that many regional heads were too easy to issue permits to boost regional income in a relatively easy way. The drastic increase can be seen in the number of coal mining permits in 2001 and 2009. In 2001, the number of mining permits was only around 750. In 2009, when permits were submitted to the regional government, the number of permits increased 13 times to 10 thousand mining business licenses (Ahnar, 2017).

Palm Oil Industry

Palm oil and its derivative products are quite important commodities for Indonesia. Until now, Indonesia is the world's largest exporter of palm oil. In 2016, Indonesia exported world palm oil by 52 percent. The second exporter after Indonesia is Malaysia. In 2015, palm oil commodities contributed to around 7-8 percent of the GDP. While in the form of taxes it contributed income of 22.27 trillion rupiahs (Adinugraha, Hadijah, & Siahaan, 2018).

Indonesia's palm oil production has increased significantly from 7 million tons in 2000 to 34.5 million tons in 2016. In other words, within 16 years there has been a 393 percent increase in production. The increase was also supported by the expansion of palm oil plantations on a large scale in the span of 16 years (Marta, Agustino, Suwaryo, & Sulaeman, 2018). These figures certainly show positive data for the country's economic growth.

But, based on the data from the research results of many institutions, the palm oil plantation sector contributes to problems that are very serious. Data from the World Bank in 2015, forest and land fires due to the expansion of palm oil plantations have caused a loss of 295 million USD (KPK, 2016). In general, when palm oil planters open new areas, they do so by burning. This method is considered the cheapest but has a serious impact on the environment.

This is one of the considerations for the European Union Parliament to reduce the use of crude palm oil as biofuels to zero percent by 2021. In their assessment, the industry has caused deforestation in the producing country. The expansion of palm oil plantations further reduces the forest area in Indonesia. In addition, the development of palm oil plantations also causes damage to biodiversity in the surrounding environment. This fact is, of course, a serious challenge for the government when on the one hand they get

a large income from palm products, but on the other hand in the long term we must bear the bad environmental impact.

To social life, we also often find land conflicts in the palm oil plantation sector. In 2015, the KPK found about 127 land conflicts in the palm oil plantation sector. These commonly happened because the area that was permitted to be opened as a palm oil plantation had been effectively controlled by the community. Mutual claims between the company and the community then lead to conflict. Another thing that often happens in licensing matters is that the permits granted are not in accordance with their designation (Marta et al., 2018).

The licensing aspect is indeed one of the problems faced by corporates. The problem is because there is no accountability and transparency in this process. Therefore, as found by the KPK, licensing of palm oil plantations is one of the most fertile areas of corruption in Indonesia (Marta et al., 2018). On this side, the government does need to improve the more transparent and accountable licensing system for corporates. They must explicitly eradicate corrupt practices in governing palm oil plantation permits.

Another thing that is also a problem in the palm oil plantation sector is the practice of modern slavery or forced labor and also the employment of children who are underage. The palm oil plantation industry is a very broad sector. Many human rights activists find that in the palm oil plantation sector there are many acts of modern slavery. Forced labor and children's employment are often found in this sector.

Coal Mining and Palm Oil Industry in the Capability Approach

So how do we assess the various problems that exist in natural resource governance, especially coal and palm oil industry in Indonesia, if we use the capability approach? As stated above, the capability approach pays attention to the ability of the community to achieve something that is considered valuable. What is meant by the community here is the community around the area and also including the community at large? Things that are considered valuable, of course, are quite not only about the value of income received.

These values will be strongly related to values that can support a good quality of life for the community. Therefore, the value that needs to be measured is not only related to economic value, especially the amount of income received. Values that are considered to support the quality of life for the community include economic, environmental, health and social cohesion values.

What is meant by economic value is how many economic benefits are received by society and also the state. The composition of the receipt of economic benefits between employers, workers, the surrounding community and the state must be distributed fairly. All parties certainly need to get economic benefits from the business sector proportionally and equitably. No party feels aggrieved by another party.

What is meant by environmental values, of course, refers to the impact of the business sector to environmental quality. In this case, we need to see how much bad and good impacts are generated from coal mining and palm oil plantations for the quality of the surrounding environment. Likewise, with the value of health. How big is the influence of coal mining on the health of the local residents?

Social cohesion is also a very important value to be considered in the coal mining and palm oil plantation sectors. We have to see whether relations among communities are getting better or even worse and whether the basic rights of certain groups are deprived or ignored. This condition must, of course, be seen carefully so that we are not only concentrated on receiving economic benefits.

Based on this perspective, how do we look at these two business sectors of natural resources? If we look at economic value, in one research conducted by T. Ade Fachlevi about the impact of coal mining on economic, environmental and social affairs in the Meureubo District of West Aceh Regency, he did show

the existence of economic benefits received by the community. In addition, he also found a positive perception of the surrounding community towards coal mines because they obtained economic benefits, although according to him, this did not occur in all places he observed (Fachlevi, 2015).

However, the research still leaves things that cannot be answered fully related to the impact on the environment, health and also the potential for social conflict. The difficulty is because this loss cannot be measured accurately as we calculate the amount of money. But even though it cannot be calculated accurately, we can clearly see the losses suffered by the community related to the poor quality of the environment, health and also the potential for conflicts from the coal mining sector in particular, as shown by documentary researchers and filmmakers of *Sexy Killer*.

Here we are indeed facing a dilemma. On the one hand, these two sectors make a large contribution economically, but on the other hand, this sector has a detrimental effect on three other supporting quality of life, namely environment, health and also social cohesion. In the coal sector, the disadvantages of decreasing the quality of the environment, health and also the potential for social conflict are enormous. Therefore, if there is no progressive improvement related to the last three things, we can value coal mining as a depriving sector of people's capabilities.

The same thing can also happen in the palm oil plantation sector. This sector is the most important to support the country's income. But we need to see long-term benefits and losses. The extent of deforestation and biodiversity damage caused by the expansion of palm oil plantations in Indonesia is very important to assess. If the government and corporates are able to answer this, the palm oil plantation industry can still be better than coal mining.

CONCLUSION

It is not easy to give an assessment to the sector that greatly contribute to state revenue. But through this consideration, we clearly need to think in the long-term and in a bigger perspective. These two sectors have clearly been noted and observed as a sector that is not environmentally friendly, decreasing the quality of health of residents in the area and also having the potential of conflict in the community. All these are of course things that are very important to see in regard to the quality of people's life. Therefore, the government certainly needs to answer all these problems, unless, they need to reduce dependency on these two sectors.

REFERENCES

- Adinugraha, A. G., Hadijah, S., & Siahaan, F. R. (Eds.). (2018). *Tata Kelola Perkebunan Sawit di Indonesia: Studi Kasus di Provinsi Riau dan Kalimantan Barat*. Bogor: Forci Development.
- Ahniar, N. F. (2017). Belajar dari Karut Marut Tata Kelola Tambang Batu Bara. Retrieved from Katadata website: <https://katadata.co.id/berita/2017/07/20/belajar-dari-carut-marut-tata-kelola-tambang-batu-bara>
- Bukit Asam. (2018). Industri Batubara Topang Pertumbuhan Ekonomi. Retrieved from Bukit Asam website: <http://www.bumn.go.id/bukitasam/berita/1-Industri-Batubara-Topang-Pertumbuhan-Ekonomi>
- Fachlevi, T. A. (2015). *Dampak Pertambangan Batubara Terhadap Ekonomi Lingkungan Dan Sosial Di Kecamatan Meureubo Kabupaten Aceh Barat*. Bogor: Bogor Agricultural University (IPB).
- Jean-Paul, F., & Martine, D. (2018). *Beyond GDP Measuring What Counts for Economic and Social Performance: Measuring What Counts for Economic and Social Performance*. Paris: OECD

Publishing.

- Kompas. (2018). Tata Kelola Tambang Batubara Bermasalah. Retrieved from Kompas website: <https://kompas.id/baca/ekonomi/2018/12/19/tata-kelola-tambang-batubara-bermasalah/>
- Marta, A., Agustino, L., Suwaryo, U., & Sulaeman, A. (2018). OIL PALM PLANTATION DEVELOPMENT POLICY IN RIAU PROVINCE: AN OVERVIEW OF THE POLITICAL ECONOMY. *Jurnal Ilmu Sosial*, 17(2), 128–144. <https://doi.org/10.14710/jis.17.2.2018.128-144>
- Nugraha, R. (2016). 7 Komoditi Ekspor Andalan Indonesia. Retrieved from Deutsche Welle website: <https://www.dw.com/id/7-komoditi-ekspor-andalan-indonesia/g-19297445>
- Nussbaum, M. C. (2011). *Creating capabilities*. New York: Harvard University Press.
- Nussbaum, M., & Sen, A. (1993). *The quality of life*. Oxford, UK: Oxford University Press.
- Sen, A. (1985). Well-being, agency and freedom: The Dewey lectures 1984. *The Journal of Philosophy*, 82(4), 169–221.
- Sen, A. (1992). *The political economy of targeting*. World Bank Washington, DC.
- Sen, A. (2014). Development as freedom. In J. Roberts, A. Hite, & N. Chorev (Eds.), *The Globalization and Development Reader: Perspectives on Development and Global Change* (Vol. 2, pp. 525–547).
- Sen, A. K. (2009). *The idea of justice*. Cambridge: Harvard University Press.
- Sulmaihati, F. (2019). Kebutuhan Batu Bara Diprediksi Turun, Indonesia Perlu Antisipasi. Retrieved from Kata Data website: <https://katadata.co.id/berita/2019/04/01/kebutuhan-batu-bara-diprediksi-turun-indonesia-perlu-antisipasi>
- Workman, D. (2019). Coal Exports by Country. Retrieved from World's Top Exports website: <http://www.worldstopexports.com/coal-exports-country/>