

ENVIRONMENTAL MANAGEMENT STRATEGY IN MINING ACTIVITIES IN FOREST AREA ACCORDANCE WITH THE BASED JUSTICE IN INDONESIA

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ABSTRACT

This article contains an overview of the cluster approach methods; the author analyses the management strategy in mining activities permit in forest area. The law management mining should be synergy policy in term of the mining activities permit in forest areas, in the Act No. 41 1999, there is still overlapping the utilization of forest between mining and forestry activities are still unresolved and still occur in some areas. Similarly, Law No. 4 Year 2009 on Mineral and Coal is not yet fully support synergically, the natural sustainability remain legal, it can be seen from the existence of many dredging coal mines, then the Law 32 of 2009 requires the use of natural resources which is in harmony and balanced with environmental functions. There is a duality of government policy, in which one side of them seeks to protect protected areas and establish rules to preserve it, but on the other hand, it is opened up opportunities for the protected forest area to be exploited. Policy or development program must be imbued by the obligation to make environmental preservation and realize the goal of sustainable development.

Keywords: Law, Management Strategy, Mining and Natures Resources.

INTRODUCTION

The application of Law No. 41, 1999 caused uncertainty between forest and mining. Prior to the enactment of Law No. 41, 1999, there is no provision that explicitly prohibited mining activities in forest areas. However, since the enactment of Law No. 41, 1999, mining activities were prohibited in the protected areas and conservation areas, so that it caused the uncertainty legal toward mining activities in protected forest areas which on-going. In this case, the government set the government regulation to replace the UU No. 1 of 2004, which set into Law No. 19 of 2004; it essentially legalizes all mining permits in protected forest areas that have taken place before the enactment of Law No. 41 of 1999. However, today, there is overlapping between the use of forest land and the activities of mining and still unresolved and still occurred in some areas.

UU No. 4 Year 2009 on Mineral and Coal remains to legalize the dredging coal mines. This Act when it is read in the framework of law should not stand alone because it is still in the field of environmental law which very related to the Forestry Law and the Environment or provision for other legislation. The only problem for entrepreneurs and local governments in its implementation may be separated. Paying attention to what stated in Article 2 of Law No. 4 of 2009 part of the principles and objectives mentioned that the mining of minerals and coal-managed based on:

- Benefits, fairness and balance;
- Supporting to the interests of the nation;
- Participation, transparency and accountability;
- Sustainable and friendly environment.

In fact, up to now, the application of the Law No. 4 of 2009 are still found that dredging coal did not meet the environmental interests, namely the destruction of forests and failed reclamation. Forestry Minister Siti Nurbaya warned the mining companies to pay attention to the environment not to be exploited; it will harm the environment in the future (Online Newspaper Repubilka, 2016).

The warning of Menhut (the Minister of Forestry) is reasonable due to the fact that a very severe environmental conditions while Menhut himself is powerless to avoid the danger of damage environment. This is because the Mining Law itself has given permission that suit what procedures are in it. Regulation has been generally supporting the dredging even in despair supporting the goal setting on benefits, fairness, balance and environmental interests of the nation. Still, mining itself felt strongly supports the destruction as occurs in other forest areas in Indonesia.

The Legal Policy in Mining Activities Permit in the Forest Region in Indonesia

Based on the mandate of Law No. 41, 1999 that one of the dimensions of the four main pillars holding the management of forest resources which is implemented through forestry planning, which is conducted in a transparent, accountable, participatory, integrated and considering the particularities and aspirations of the regions, so that to provide guidance and direction in the achievement of goals of implementation of forestry for the greatest prosperity of the people are equal and sustainable. The implementation of Forest Planning is done with four main activities namely:

- Forest inventory;
- Inauguration and of Forest Area Stewardship;
- Establishment of forest management areas; and
- The forestry planning and control of the use of forest areas.

In addition, Act No. 32 of 1999 requires the use of natural resources be harmonious and balanced with environmental functions. As a consequence, policies, plans and/or development programs must be dynamic with the obligation to conduct environmental preservation and realize the goal of sustainable development. The forest area is a specific area, which is appointed and

confirmed by the government to be protected as permanent forest. The forest area needs to be established to ensure legal certainty regarding the status of the forest area, spacious layout and limit of particular area that has been designated as permanent forest. As one of the pillars of the life support systems, forest management policies must be able to bring benefit as much as possible for the welfare of society.

Basically, the forest has two sides that cannot be separated, the forest as a natural resource and forest as an ecosystem. Forest as a natural resource saving potential use for the purpose of national development interests, in line with the mandate of Article 33 paragraph (3) 1945. The forest as an ecosystem ensures the preservation of natural resources which consist of animals, plants that live in and be a natural phenomenon, either individually or together have the functionality and beneficial as environment-forming element, whose presence cannot be replaced. Forest management policies have to see both sides of the forest which cannot be separated. In the sense that the forest can be protected, cultivated, preserved and beneficial because the nature, characteristics and virtues, optimally in the interest of national development.

The large opening of mining permits led to forest degradation that began during the 32 years of forest regeneration of the New Order regime, showing clearly how the forestry sector occupies an important role in the Indonesian economy. During that time, forests, as well as other natural resources, were completely depleted as the forestry development industry during the New Order was built solely to pursue economic value, to serve export orientation and to fulfil foreign debt payments, implementation of the old Basic Forest Law. 5 years 1967. If traced carefully, in fact, too much opening of mining permits caused the degradation itself to occur since the Dutch East Indies government with the emergence of Forest Regions 1865, 1847, 1897, Forest Ordinance 1927 and up to Act 41 of 1999 on Forestry, PERPU Number 1 Year 2004 concerning Amendment to Law Number 41 Year 1999, last ending Law Number 19 Year 2004 regarding Government Appeal in Lieu of Law Number 1 Year 2004 regarding Amendment of Law Number 41 Year 1999 concerning Forestry to Act-What. Then, coupled with the emergence of Law Number 32 Year 2009 on Environmental Protection and Management and Law Number 24 Year 2007 on Disaster Management.

The existence of the enactment of some of the above legislation, it turns out, does not dampen the issue. Too much opening of mining permit causes forest degradation in Indonesia. In fact, the government has tried to be responsible according to the mandate of the fourth alenia of the Preamble of the 1945 Constitution of the State of the Republic of Indonesia which reads as follows. "The Government or the Unitary State of the Republic of Indonesia protects the whole nation and the entire blood of Indonesia, promotes the common prosperity, the intellectual life of the nation and participates in the implementation of world order based on freedom, eternal peace and social justice".

Not only has the legislation, the government, in this case the Ministry of Environment been socializing the national program, the Program Go Green Indonesia (MIH) in April 2013. This program has been proclaimed by President Susilo Bambang Yudhoyono on the anniversary of World Environment Day, 5 June 2006. In fact, there are still a lot of problems. Too much opening of mining permits causes unhandled forest degradation based on the laws and regulations (Table 1). Including government programs that have not yet shown significant improvement.

No	Subject	Regulation
1	Law No. 5/1960	About Agraria (UUPA)
2	Law No. 1/1967	About Foreign Investment
3	Law No. 5/1967	on the Principal of Forestry
4	Law No. 7/1968	concerning Domestic Investment
5	Law No. 4/1967	Basic Provisions on Mining
6	Law No. 4/1982	Basic Principles of Environmental Management
7	Law No. 5/1990	Conservation of Biological Natural Resources and Ecosystems
8	Law No. 24/1992	Spatial Planning
9	Law No. 5/1994	Ratification of the United Nations Convention on Biological Diversity
10	Law No. 6/1994	Ratification of the United Nations Convention on Climate Change
11	Law No. 23/1997	Environmental Management
12	Law No. 22/1999	Regional Government
13	Law No. 25/1999	Financial Balance between Central and Regional
14	Law No. 41/1999	Forestry
15	Law No. 32/2004	Regional Government
16	Law No. 33/2004	Financial Balance between Central and Local Government
17	Law No. 19/2004	Concerning Forestry in Permitting Mining Activities in Forest Areas
18	Law No.7/2004	Water Resources
19	Law No. 32/2009	on Environmental Protection and Management
20	Law No. 25/2007	on Domestic Investment
21	Law No. 27/2007	on Spatial Planning
22	Law No. 4/2009	About Minerals and Coal
23	Law No. 32/2009	Environmental Protection and Management
24	Law No.23/2014	on Regional Government
25	Law No.92/2015	on the Second Amendment of Law No. 23 of 2014 on Regional Government

Source: Statistics Indonesia's forestry ministry, 2016

Environmental Management Strategy Based on Justice in Granting Mine Permit in Forest Areas

As one of the pillars of the life support systems, forest management decisions must be made in a way that guarantees harmony, balance and continuously between man and God as creator, between man and society and between humans and the ecosystem. Forest management must be addressed not only to derive optimal benefits from forests and forest areas for the welfare of society, but also must support the preservation of ecosystems and the conservation of natural resources.

Some problems in the forestry sector, as described previously, can be drawn a conclusion that the problem arose as a result of the adoption of the conventional paradigm of forest management which tends to be exploitative regardless of the characteristics and carrying capacity of the ecosystem of a forest. In term of forestry theory, historically the forest management methods can be divided into two methods, namely conventional forest management methods and modern methods of forest management. Forest management methods

conventionally divided into mining timber (timber extraction) and timber plantation management (timber management). The timber extraction method is a method of forest management which has been practiced for thousands of years, since pre-history. Generally, timber extraction is a method of exploitation of the forests by sorting on a large scale without regard to the balance of the ecosystem, as well as the negative effects (John & Seema, 2008). This method has been practiced by since humans have the technology to cut down trees. With its characteristic of exploitation, this method of course has led to the destruction of forests and fatal ecosystems.

One of the causes of injustice and exploitation which has resulted in too many opening mining permits causes the increase of forest degradation, namely the emergence of forest destruction, many mining permits that interrupts the principles of sustainability conducted by the Ministry of Environment and Forests whether they have an official permission or do not have an official permission from the government. In the provisions of Law No. 32 of 2009 about the Protection and Management of the Environment and by Act No. 24 of 2007 on Disaster Management, however, the state cannot remain silent on the issue of too much mining permits which cause degradation and leads to ecological disaster. In other words, the state should be responsible for the ecology and sustainability of the disaster caused.

Too many mining permits which caused degradation in Indonesia is actually from the corrupt legacy of a political and economic system and assumption that natural resources, particularly forests is a source of income to be exploited as much as possible in pursuit of personal gain, regardless of the effect on the sustainability of forest ecosystems (Asmeri, Alvionita & Gunardi, 2017; Rokhmawati, Gunardi & Rossi, 2017; Gunardi, Febrian & Herwany, 2016). Operation of forest areas had brought effect on many mining permits opened and caused the forest degradation which quite surprising. A result that appears is the accumulation of damage forests and the changes over their function, then, the ability to settlement, as well as the use of forest land outside the forest sector through the hiring of forest areas.

According to the Ministry of forestry based on the research in Nature Climate Change journal, Indonesia has experienced a decline which reached 0.4 million hectares of forest per year in 2009-2011, then in 2012 reaching 0.84 hectares (official website of Ministry of Environment and Forestry, 2016). In the years 2013-2014 many data about mining permits which opened and caused degradation of Indonesian Forest Region Inside and Outside Forest Area (ha/yr.) it had reached 170.626.10 Ha (Statistics data of the Ministry of Environment and Forestry, 2015).

On the other hand, the disaster in the forest is considered as a result of political and economic system that is corrupt (Alfian, 1978), which considers the natural resources, especially forests as a source of income that can be exploited, either for political or personal gain. Such conditions, of course, can make a forest in degradation, even being an ecological disaster. In fact, the ecological disasters cause human fatalities, environmental damage, damage of property and the psychological impact. In this case, the ecological disaster caused by the conversion of forest lands on the plateau, loss of mangrove forest (mangrove) and the erosion and narrowing of the river. All of these come from spatial management of uncontrolled, causing impaired balance impacting ecosystems and caused the natural disasters (Rostron, 2001).

Timber extraction methods have caused fatal damage to the forest and finally the forest management paradigm changed into timber management methods to restore the sustainability of

forest area, in order to increase the productivity of timber. In 1710, Hans Carl von Carlowitz created a concept of monoculture forest management. This concept emphasizes on the development of timber productivity production as much as possible. With the concept of monoculture, managing costs can be reduced as low as possible, but it can result in high production level. In other words, similar to timber extraction method, this method still emphasizes on the exploitative forest management to pursue economic interests, rather than the interests of ecological forest ecosystem.

The paradigm of modern forest management seeks to restore the ecological function of forests. The modern forest management come from some ideas where the use of forest areas is not only intended to pursuit purely economic interests through exploitation of natural resources, but also to support social and ecological function of forest area. The ecological functions addressed in maintaining the ecosystems and the conservation of natural resources in the forest area while the social function is addressed in the management of forest areas which provide direct benefits to communities around the forest. Thus, modern forest management methods tries to make a framework of forest management which relies on the public economy and encourage the active participation of society in the context of forest management without compromising the carrying capacity of ecosystems and environmental sustainability.

In modern forest management methods, there are some consequences which must be believed in the implementation of forest management (Ozaer, 2016):

- That forests and local communities cannot be separated. Because of the orientation of forest management must be changed from the interests of financial gain to the interests and needs of the community, especially those residing in forest region, where the community is the main actor.
- That the forest is an integral ecosystem. Therefore, conventional forest management which is oriented on wood (timber extraction) should be changed to the forest management which oriented to the multi-product natural resources, the timber and non-timber forest, environmental services and other benefits of forest.

There are some experts who stated the theory of modern forest management. MR. Koelling from the Department of Forestry at Michigan State University had lifted the theory of Forest Resource Management (FRM). This theory asserted that the forest use as part of a forest management system must be able to guarantee that forest ecosystems and resources contained in it will be able to provide more benefits for society and for the balance of nature (Abdul, 2011). In addition, the theory also argued the Forest Ecosystem Management (FEM) which confirms that the forest management should be able to maintain environment that not only the ecosystem for plants and animals, lives nearby, but also highly dependent human nature (Scott, 1994).

The paradigm of ecosystem-based forest management and community should be implemented in every regulation and forest management policies. In addition, this paradigm should also be reflected in the attitudes and behaviour of the stakeholders to be carried out to the lowest level. In Act No. 41, 1999, the paradigm of forest management based on ecosystems and society are implemented in the principles of forest management which aims to improve the ability to develop capacities and communities empowerment participatory, reasonable and friendly environment so that can create social security, economic and resilience due to the external changes. The principle was later realized through coaching and counselling to the community and optimization of the active role of communities in forest management.

The concept of forest management which is based on the community's economy also have to be accommodated within the framework of Law No. 41, 1999 through the concept of Social Forestry or Collaborative Forest Management (CBFM). There are some principles which are important in the implementation of the Social Forestry, (Ministry of Forestry, 2012), namely:

- Ability to empower communities;
- There are areas which allowed management rights to the public;
- Goal setting and application of social forestry in the respective functions of forests;
- A cost-sharing, where there is distribution of benefits and costs between the public and the government;
- Use the principle of the DAS approach (Watershed) basin, it means that there is a relationship in a watershed upstream and downstream because besides their on-site benefits also include the off side effects, which could affect the protected forest especially its protective function.

The social forestry should be able to cover all form, manner and scale of community participation in forest management in the corridor which ensures the preservation of conservation of forest resources that are managed (Dudung, 2000). This is because each forest has its characteristics and different ecosystems. Moreover, sociological and economic conditions also influence the shape and format of social forestry. Social forestry concept can be implemented in the form of community forestry through the provision of right management in limited basis within a specified period. The destruction of forests, in terms of mining activities without regard to the environment sustainability has caused damages to the state itself, destruction of social and cultural life and the environment and the increase global warming has become a regional, national and international issue (Rokhmawati and Gunardi, 2017).

CONCLUSION AND RECOMMENDATION

Mining activities have greatly expanded over the whole of Indonesia's forests result in damage of the natural environment and this condition is very severe. It has created a bad environment for health, decreased quality of human resources, the destruction of infrastructure, the loss of traditional rights, the destruction of farms, poverty, the main cause of endless flooding and environmental problems that continuously bad.

Mining activities in Indonesia do not reflect the application of progressive-based environmental law but only took an advantageous aspect of the area such the Act No.4 of 2009 on Mining without associating with the Environmental Management Act, such as Law 32 of 2009, Act No. 26 of 2007 about spatial planning, Law No. 5 of 1990 about Conservation of Natural Resources and Ecosystems and Law No. 41 of 1999 about forestry.

Environmental Law which based progressive law teaches an awareness that managing the environment is a major issue of all the formal legality which has a negative impact on the environment and society. Therefore, in the implementation of Law No. 4 of 2009 should promote the environmental law as an umbrella for other legislation. The Indonesian government should initiate and try new alternatives to develop non mining sector as the main income such as plantation, agriculture and small economy development of community. The strategic developing is an educational framework at seeks to meet the need of the present without compromising the

need of future generation, focus on critical thinking and problem solving and adopts a multi methodological approach, participatory decision making and local relevance (UNESCO, 2001).

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