

**Application of Eco-Democracy to Environmental Legal Protection Post-Mining Reclamation in Indonesia**

**Zulfatah<sup>1</sup>, Hidayati<sup>2</sup>, Andi Nur Hidayah<sup>3</sup>**

Universitas Borobudur, Jakarta, Indonesia

Ikbhmuba@gmail.com<sup>1</sup>, hidayati@borobudur.ac.id<sup>2</sup>, nurhidayah@borobudur.ac.id<sup>3</sup>

**Keywords**

Eco-Democracy, legal protection, reclamation

**Abstract**

Mining in Indonesia still leaves many excavation holes that have not been reclaimed, at least 8 million hectares of post-mining land after the use of coal mining land in East Kalimantan Province. As a result, from 2011 to 2018, 32 people died, most of them children, while 140 people died in all regions in Indonesia due to drowning in ex-mining holes. The aim of this research is to provide legal protection for land through the application of the Eco-Democracy concept due to violations by fraudulent entrepreneurs. The method used is the approach of statutory opposition and conceptual opposition of regulations relating to legal issues resolved through a statutory approach. The results of the research explain that reviewing all laws written in Government Regulation Number 78 of 2010 concerning Reclamation and Post-Mining and Number 4 of 2009 in the Republic of Indonesia Law concerning Mineral and Coal Mining requires companies to restore land through reclamation after the mining process is complete. Prepare collateral in the form of money given by businesses committed to restoring and improving the land environment. The government authority will supervise the reclamation during its implementation so that mining entrepreneurs will comply and not abandon the ex-mining land.

*Corresponding Author* : Zulfatah

E-mail: [Ikbhmuba@gmail.com](mailto:Ikbhmuba@gmail.com)



**INTRODUCTION**

To deal with emergency problems caused by mining holes, the idea of eco-Democracy emerged as an effort to protect (Beck, 2018). The film *Sexy Killer* departs from the fact that law enforcement in mining after mining permits expire so that post-mining coal sites in Indonesia, especially in East Kalimantan province, are still weak, with 3500 post-mining holes that are not legally protected. from 2011 to 2018, 32 people died, mostly children. Nationally, between 2014 and 2018, 140 people died at former mining sites (Pettersson, Högladh, & Öberg, 2019). This happened because the mine location was near community housing and there were no warning or prohibition signs (Kroll-Smith & Couch, 2014). In the 2019 presidential candidate debate, the number of post-mining excavations which caused deaths became a public topic of discussion. Unfortunately, the two leaders of our country, namely the President, have not provided concrete solutions to the social, economic and environmental problems that have arisen as a result of reclamation that has not been carried out. According to one of the incumbent candidates, there are only one, two, or three reclamations that have not been carried out. The statements at that time have certainly increased due to the current data updates. The coal mining system that applies in Indonesia is an open mining system, which causes environmental damage, including loss of forests, the minerals in them and the mineral layers of the soil, and forest vegetation. Therefore, entrepreneurs must comply with regulations through post-mining reclamation in order to restore the environment to the previous state caused by coal mine excavations.

Reclamation is an activity during mining business procedures to regulate, restore and restore the environmental order and natural communities so that they return to tropical forests which are the hallmark of the country, according to Law Number 4 of 2009 concerning Mineral and Coal Mining. This law is further strengthened by Government Regulation Number 78 of 2010 concerning Reclamation and Environmental Change (Gu et al., 2018). After the mining industry, ESDM Ministerial Decree (Permen) Number 26 of 2018 concerning the Implementation of Good Mining Principles, was then issued through ESDM Ministerial Decree (Kepmen) Number 1827/2018 concerning Guidelines for the Implementation of Friendly Mining Engineering Principles. However, in fact, there are still mining companies that have not closed excavations by closing earthen holes that were once used for coal mining. It seems that coal entrepreneurs are not bound by post-mining responsibilities. Millions of hectares of post-mining holes represent a major environmental problem in Indonesia (Pratiwi et al., 2021). According to report data from the Ministry of Energy and Mineral Resources, as of June 2018, around 1,569 IUP (Mining Business Permit) holders, IUPK (Special Mining Business Permit) holders (Pay, 2018). Apart from that, there are still cases where information data and fund calculations do not match each other, which causes procedures in the field to not run according to plan. According to the regulations, business actors need to keep collateral to cover ex-excavation sites for reclamation before opening activities, but it is still the company's obligation to close excavations after mining work (Amir, Mintia, & Kharis, 2019). If the cash deposit is not sufficient, the business license holder must provide additional funds. Unfortunately, what happens in practice is that most IUP holders do not save deposits of security deposits to cover excavations, thus leaving excavation sites still open, or closing excavations not yet optimally according to target.

Environmental reforestation in post-land use practices as additions that leave behind large excavations are often ignored and lost by other sectors or policies, both technical affairs and executive officials, in political forums or in legislative institutions that handle the mining and energy sectors. forestry sector, plantation sector, investment sector, tourism sector and so on. Therefore, the obligation to cover excavated excavations on mining land or post-mining land reclamation has a very high number of irregularities (Feng et al., 2022). Currently, Indonesia is in a state of ecological emergency, and the need for government involvement in the forest or environmental sector is a priority scale in every policy meeting they work on. According to researchers, the Constitution must increase the standards governing environmental protection so that all laws can be monitored because they are all subject to the constitution. In addition, the idea of environmental policy is intended to increase awareness about the importance of the environment in every government policy, which can help overcome the problem of environmental law violations that are currently occurring in Indonesia.

The emergence of the concept of eco-democracy, namely the idea of eco-ocracy, such as the protection and use of environmental conservation towards political policy. Legal politics in the forest sector and environmental conservation in its protection and utilization are built to achieve ecocracy. The concept of "eco-democracy" comes from the words "environmental democracy", a new term that is better defined as recognizing the greatness of nature and the environment, and its components. Apart from that, understanding the limited infrastructure and facilities for processing the environment and the importance of understanding environmental sustainability so that people do not take exploitative actions and destroy forests excessively so that negative impacts will emerge from this exploitation. Concern about natural conditions as well as forests and the environment which must be protected by legal instruments. Contained in laws relating to the forest and environmental protection sector, as written in the 1945 Constitution, stipulates that an ideal living environment is a human and constitutional right for every citizen. In the 1945 Constitution of the Republic of Indonesia, legal protection of the environment is also regulated in detail, as shown in article 28 H paragraph 1, which states that every citizen is guaranteed the right to live in prosperity physically and mentally, for example having a place to live and a beautiful living space. and healthy, have the right to health services. According to Article 33 paragraph 4 of the 1945 Constitution, the national economy must be built based on the

principles of economic democracy, efficiency and sustainable justice, have an environmentally oriented insight, an independent nature, and achieve a balance between national economic progress.

The discussion will focus on environmental regulations that must be protected during the two government orders such as the new order and the reform order. The New Order government used law number 4 of 1982 and law number 23 of 1997 to implement authoritarian politics on the basis of orthodox law, while the reform regime implemented law number 32 of 1997 to improve environmental protection. Regulations that benefit the environmental sector as regulated in the 1945 Constitution and other legal products are the initial benchmark towards a country that pays attention to the economic sector. Pan Muhammad Faiz wrote a second article on ecology, "Environmental Protection in a Constitutional Perspective", which has appeared in the constitutional journal (Ramadhan & Arief, 2023). This article is very similar to the book from the "Green Constitution" product which was introduced by researchers with an emphasis on the importance of protecting the flora environment through statutory regulations. Legal protection of the environment is also carried out in large countries such as France and Ecuador, these countries have clear and strict environmental laws. France had a charter on environmental flora in 2005, and the South American country of Ecuador also included environmental flora as a subject of law. After the 1945 Constitution established environmental protection standards, the concept of ec-democracy emerged, which means that the same system as democracy functions as environmental sovereignty. Therefore, environmental law protection must immediately improve the articles by adjusting environmental conditions which still do not include environmental indifference. One way to implement this is to incorporate several articles regarding environmental regulations into the constitution.

Eco-democracy: the basis of science regarding democracy in the environmental sector for the realization of sustainable national goals. This concept discusses how ecology-based democracy is needed to achieve sustainable development goals. Democratic shifts such as the concept of a green constitution lead to the implementation of sustainable development goals. By strengthening gender and ecoregional development, the new trend of open local government and green economy has recognized environmental sovereignty in local development. According to the concepts of ecofeminism and ecoregions, practice in the local context of sustainable development considers local factors that are unique and different due to diversity. Therefore, involvement, law enforcement, sustainability, local wisdom, effectiveness, for the sake of prosperity are the main ecocratic principles.

This research will focus on specific environmental issues regarding the obligation to restore land or reclamation that has been excavated due to mining, causing deviations from regulations, apart from that, in terms of monitoring compliance with land restoration or reclamation. Various government regulations cannot reduce the level of violations of reclamation obligations, so several procedural options are needed to seriously handle environmental protection. This research aims to provide legal protection for the environment through the application of the concept of eco-democracy due to violations by fraudulent entrepreneurs.

## **RESEARCH METHODS**

This research takes a normative legal analysis approach to explore the implementation of the death penalty in the Indonesian legal system. The objects of research include legal documents, court decisions, and relevant legal literature. In the data collection process, document studies and content analysis are conducted to gain in-depth understanding. The data analysis method used is qualitative analysis with an interpretative approach, by integrating two main approaches, namely legislative and conceptual. The conceptual approach is sourced from perspectives and theories that continue to experience developments related to legal science.

## RESULTS AND DISCUSSION

### Reclamation work is the responsibility of mining entrepreneurs

Reforestation and land restoration on post-coal mining land, which is usually called reclamation, in accordance with article 99 of Law Number 4 of 2009 concerning Mining, Minerals and Coal provides regulations regarding the rights and obligations of owners if they have an IUP. To reduce the negative impact of this law, responsibilities include:

- (1) When applying for a mining business permit for production operations or a special mining business permit for production operations, all IUP holders including IUPK must submit reclamation and post-mining operational plans;
- (2) Land restoration or reclamation activities after production operations are carried out by post-mining operational land allocation procedures;
- (3) The use of land restoration after production operations as mentioned in paragraph (2) is stated in the official land use agreement between the IUP and IUPK holders and the land rights holders.

However, in practice there are still mining entrepreneurs who already have mining business permits that are in default or are neglecting their responsibilities regarding land restoration through reclamation. In East Kalimantan Province, there were 3,500 excavations recorded after mining activities with a death toll of 32 people. Based on the provisions of Law no. 4 of 2009 concerning Mineral and Coal Mining, mining companies leave mining sites without reclamation. Government Regulation Number 78 of 2010 concerning reclamation and post-operational mining production stipulates that owners of Production IUP and Production IUPK must carry out land restoration through filling or reclamation. The reclamation plan is made for five years, the length of the mine's operational time can also be adjusted if the production mine is not yet five years old. First, get approval from the government, then operations can be carried out. The Production IUP and Production IUPK owners appoint officials who are professionals in reclamation. Apart from that, reclamation starts 30 days after there are no field operations on a land until the excavation is successful.

Every year, the owner of the Production IUP and Production IUPK makes a report to the government in stages or until the excavation is covered and woody trees are planted, making a progress report every three months after mining. Apart from that, it also provides reclamation guarantee deposits in the form of deposits with the classification of (1) accounting reserves, (2) in the form of deposits, (3) bank guarantees, and (4) joint accounts. The government's involvement in helping provide information about professional workers for filling in post-mining reclamation land with security deposits for activities carried out by IUP or IUPK owners has not been successful (Azis & Bariun, 2022).

Mining companies are responsible for protecting equipment and infrastructure resulting from mining, including land used for previous mining and surrounding land. Any deviation from the reclamation provisions and/or post-production operations will be subject to administrative sanctions such as a written letter, temporary prohibition of production operations, or permanent termination of the IUP, IUPK, or IPR. Every year, mining companies report the implementation of reclamation to the Ministry, Head of Provincial Region, or Regency/City in the area of government responsibility. However, based on the evaluation report or field assessment, if the company fails to achieve/violates the requirements for reclamation obligations in accordance with the regulations, the Ministry, Head of the Provincial Region, or Regency/City can appoint a partner/third party.

### Post-Mining Operational Land Supervision

Supervision is an important part of the control function in enforcing mining management laws. This function includes aspects of supervision and control of mining operations. The purpose of supervision, according to Verstedden, is to protect the public from feeling safe (Syafii & Zamroni, 2018). In terms of mining management, the element of supervision is very important. This means that the government supervises individuals or companies that have permits to carry out additional management activities to prevent deviations from the permit rules granted by government authority in accordance with regulations.

Government Regulation Number 55 of 2010 concerning Development and Supervision of Business Management regulates operational supervision of mineral and coal mines, especially post-mining activities. Article 13 provides supervisory authority for mining in the mineral and coal sector, namely:

- (1) The Ministry makes regulations to supervise mining sector management production operations carried out by provincial level, district/city level governments, and in accordance with their authority;
- (2) Officials at the ministry, governor level and regent level, in accordance with their authority, supervise Government Regulation Number 55 of 2010 concerning Guidance and Supervision of Mining Business Management carried out by IUP holders.

Government Regulation Number 55 of 2010 concerning Development and Supervision of the Implementation of Production Operations in Article 16 regulates: a) Technicalities in mining operations; b) marketing techniques; c) financial management; d) operational data on the mineral and coal sector; e) Restoration of nature conservation; f) Security assistance during production operations; h. Post-mining operational forest reforestation, restoration of ex-mining excavated land, and post-mining.

Using goods, services, technological capabilities and advances in local design levels. At a minimum, monitoring of reforestation or reforestation, land restoration, and post-mining production operations consists of:

- a Production and environmental monitoring in accordance with the environmental greening plan that is owned and approved;
- b Planning, management and restoration of land in accordance with standard procedures;
- c Establish and pay reclamation deposits;
- d Post-mining operational land restoration;
- e Operational and paying for post-mining operations; And
- f operational standards in accordance with statutory regulations.

Operational monitoring of mineral and coal mining production is carried out at the time of permit application or post-activity. Monitoring is carried out in stages according to the planned time through planning, evaluation, monitoring and progress of program activities. Auditors in mining activities have the infrastructure authority to carry out reviews, inspections, investigations and tests even when carrying out this monitoring. This auditor is carried out by officials appointed by the Ministry, Governor Level officials, and Regent Level officials, or Mayors through:

- a Auditors are adjusted to the review schedule or integrated auditor; and/or
- b Matching data and evaluating books reported from IUP, IPR or IUPK owners. Monitoring activities, officers who are given authority by officials of the Ministry, governorate, or Regent, or Mayor have a letter of assignment to inspect mining land.

Therefore, restoration of mining land is part of the government's monitoring authority, as well as the authority of entrepreneurs. These two responsibilities can be carried out in an integrated manner. There is no reason not to carry out post-mining reclamation when supervision is carried out properly in accordance with article 36 above. Government decisions in the form of permits require special attention, according to Article 39 Paragraph 2 Letter B of Law Number 30 of 2014 concerning Government Administration. According to this article, every effort or action taken by citizens to maintain public order requires special attention and handling from government agencies and/or officials.

Law no. 27 of 2008 concerning the Ombudsman article 1 number 3 states that administrative irregularities are behavior or actions that are against the law, exceeding authority, or using authority for purposes other than existing laws, and neglect of the obligation to supervise the implementation of operational procedures for mineral mining production and coal, especially the implementation of land restoration carried out by the government can be categorized as an act of administrative irregularity.

According to Article 112 of Law Number 32 of 2009 concerning Environmental Protection and Management, officials who have authority if they do not monitor the willingness of business actors to carry out land restoration after mining operations will be subject to serious criminal sanctions. Any official with authority who deliberately neglects to ensure that businesses and/or activities responsible for environmental pollution and/or damage caused by criminal management and/or activities will be subject to imprisonment for a maximum of one year or be subject to a maximum fine of 500,000,000 (five hundred million).

Determining the official who has the authority, Prof. Tatiek Sri Djamiati, (2010) said there are two types of errors: individual negligence (*faute personnelle*) and official negligence (*faute de service*). Individual negligence occurs when authorized officials demonstrate a person's weaknesses, desires, or passions, and inattention or negligence. Although errors in office are only related to public service and occur due to errors in the use of authority

Responsibility for government actions consists of personal errors and de-service errors, errors committed personally are held personally accountable, and errors committed due to position are held accountable *ex officio*. The functionary or approach relates to personal responsibility. From an administrative law perspective, administrative negligence in the use of authority in serving the public is correlated with personal authority. Official responsibility refers to the legalization of positions in government. The guilty person receives a written, criminal or civil warning.

### **The concept of Eco-democracy as Concern for Environmental Law**

Movements that free humans from social and natural bonds are called democratic. As a result, the large-scale industrialization of nature led to a drastic increase in the exploration and exploitation of nature in all countries of the world. But it is very unfortunate that exploration and exploitation of nature is carried out only to gain financial profit. Damage to nature and the environment occurs everywhere, disrupting the function and carrying capacity of life together.

In the Amazon, exploration and exploitation of nature mainly takes place in the form of logging for timber, as well as clearing land for agriculture and livestock. As a result, thousands of hectares of rainforest that serve as the world's lungs are destroyed each year. Not only that, these activities also threaten biodiversity, resulting in the extinction of unique species that can only be found in the Amazon forest. The impact is not only felt by local communities and wildlife, but also by the rest of the world due to the loss of ecosystems that play an important role in regulating the global climate.

However, nature has a living system that depends on the surrounding environment. This means that democracy must also be considered responsible for the current damage to ecosystems and the environment around the world. There is no reason to oppose democracy as a whole; however, ecocracy, a new idea, must control the future development of democracy.

The imbalance between humans and the surrounding environment is caused by humans' increasing dependence on natural resources, according to Al Gore in his book *Earth in the Balance* (Haydock & Srivastava, 2019). The continuous reduction in natural resources in all parts of the country, for example the reduction in the number of forests that rely on rain every second, the ozone hole that is increasingly gaping, and the potential for greater damage to the Earth's balance. Amount of forest loss: According to Forest Watch Indonesia records from 2009 to 2013, Indonesia's forests lost more than one million hectares in its annual data (Tsujiro, Yumoto, Kitamura, Djamaluddin, & Darnaedi, 2016). The results of Forest Watch Indonesia's research show that provinces in Indonesia have experienced a shift, for example North Sumatra province, East Kalimantan province and North Maluku province from forest to industrial functions. Indonesia's forests are disappearing at an extraordinary rate per minute. From 2013 to 2016, as many as 718 thousand hectares of land have experienced extensive forest confinement, for example in North Sumatra province, East Kalimantan province and North Maluku province. The reduction in forest area covers 61% of the total (Mufidah & Habibi, 2019). Production Forest areas experience the majority of

deforestation. On the other hand, forest areas that function as protection and conservation are also experiencing deforestation. In the same way, 68 thousand hectares of natural forest has been removed for conservation and protection purposes, and more than fifty percent of the remaining forest is under permits. Therefore, extractive industrial activities that are greedy for space are the main cause of deforestation in the three provinces. Cases that show the loss of natural forests in permitted areas due to excessive industrialization of nature, an environmental crisis is occurring in many countries around the world. Various countries argue that the constitutionalization of environmental regulations is becoming more important in state legislation, so that the authority over environmental regulations must be able to communicate constitutional principles regarding environmental protection. For example, the Spanish constitution addresses the protection of life specifically, the Polish constitution includes the protection of life among human rights, and the Portuguese constitution links environmental policy to the duties of state agencies involved in preserving flora and tackling perpetrators of environmental destruction.

Although Indonesian law makes regulations regarding the environment indirectly and guarantees human rights, its implementation is used in practice to support the preservation of the surrounding nature (Muawanah et al., 2018). In Indonesian regulations, there are several articles that regulate environmental protection implicitly, such as article 28 H paragraph 1 and article 33 paragraph 4 of the 1945 Constitution of the Republic of Indonesia. These articles form the basis of green-oriented constitutional policies and regulations. France is the country with the strictest environmental laws, with an Environmental Charter incorporated into its constitution since 2005. Even more extreme, Ecuador includes nature in its constitution, demonstrating the country's strong commitment to environmental protection. The idea of ecocracy, also known as "eco-crazy", emerged as a result of a new worldwide trend to establish legal standards for environmental protection. According to the Brundtland Report, eco-democracy is defined as submission to natural resources and the forces of life within it, knowledge of the limited extent of the natural surroundings, collaboration with the environment, and most importantly, continuously creating something new in the ecological system. in order to respect the Earth with all its contents without exploiting it.

Meanwhile, researchers say that in a state power system, there are several holders of sovereignty, namely God (Theos), King (monarch), Law (nomos), and People (demos). Democracy is the idea of two types of sovereignty: the idea that God is the authority and has the highest power is called theocracy, the idea that the law holds the highest sovereign authority is called nomocracy, and the idea that considers the people as the holder of sovereignty is called democracy. Researchers discuss the contents of the Green Constitution in scientific work with the topic "The Idea of Environmental Sovereignty: Democracy Versus eco-crazy" and offer the latest understanding of the natural environment also having independent sovereignty and autonomy. This, the environment or community always considers as part of an entity with its own authority. If you already know the terms "theocracy", "monarchy", "democracy", or "nomocracy", then the idea of "environmental sovereignty" is always associated with the name "eco-democracy", another name is "ecological sovereignty".

The researcher is of the opinion that the idea of eco-democracy is that the researcher's opinion can also provide answers to the very high number of cases regarding defaults/violations regarding the obligation to restore land through reclamation which should be carried out by entrepreneurs after mining operations and seriously supervised by officials who are given authority by law. Even though there are several written and unwritten regulations that require entrepreneurs to carry out backfilling of excavated areas, including mandatory deposits to pay for backfilling of excavated areas before production operations begin, several relevant entrepreneurs do not comply with this, even though it is written in the regulations. As a result, responsibility regarding the surrounding natural environment is often more important than political or economic issues. Thus, previous researchers are of the opinion that the concepts of the environment and sustainable development are the same as the concepts of democracy, nomocracy, or include theocracy as well.

Eco-democracy is an expansion of democratic thinking. According to previous research, the implementation of democracy in every country in the world will not endanger other countries. Therefore, democracy does not limit the closeness of one country to another country or only the desired country. As quoted by researchers, Jacqueline Aloisi de Lardere describes eco-democracy as a series of measurable actions through international standards to protect the natural surroundings, including the environment. There is a term, this idea aims to reunite life opportunities between the world's environment and humans, animals and plants in a community friendly to nature.

### **Application of the Eco-Democracy Concept in Connection with the Green Concept**

The concepts of "green democracy" and "ecological democracy" are closely related. The Brundtland Plan is closely related to the use of the term "eco-democracy" in the creation of green constitutions in several countries. The word "eco-democracy" comes from the words "environmental democracy". A new term which is now more defined by recognizing the natural surroundings including the environment including all its components (Bell, 2019). Also understanding that the carrying capacity of the environment is limited and the importance of understanding environmental sustainability so that every citizen does not act to destroy the environment and the universe without imagining the negative consequences. In his environmental philosophy also known as "environmental philosophy" Henryk Skolimowsky developed the idea of ecocracy, which considers the relationship between humans and their environment. Thus, eco-democracy is another form of democracy that has no borders within a national territory with broad meaning due to the relationship between the earth and the universe. Eco-democracy is a democracy that is not dangerous for the earth and the universe, including our country. A different opinion, previous researchers explained that we see eco-democracy as a point of view of an activity that has "environmental protection" as a benchmark. Using broad international standards, this can be done. Something called "friendliness to nature", the natural environment consisting of humans, animals and plants constitutes one community.

With the idea of "deliberative democracy", Indonesia's deliberative democracy has the power to prevent modern developments related to the environmental crisis. Proponents of "eco-democracy" often remind us that natural vulnerabilities, such as global warming, are not just natural problems; they also involve complex issues of justice and democracy. To illustrate, the impact of greenhouses is mostly a problem caused by a minority of well-off people. Rich countries produce more global warming emissions than poor countries, based on per capita income. Humans with wasteful lifestyles are often the biggest contributors to emissions, even within the country itself. Ecological concerns are an example of the failure of democratic economics. To achieve this, an environmentally friendly political system is needed. In turn, a political structure that is friendly to nature implements the implementation of the "meaning of greening" by all elements involved in its structure. Therefore, previous researchers concluded that understanding and spreading an ecocentric culture that focuses on ecology is important for green political transformation. This is necessary on top of an already green political landscape. This is a type of democracy that does not choose one of the two approaches, but chooses both when it comes to procedures and substance that includes structure and values. Thus, ecological democracy differs from previous theories of democracy which focused only on human relations. As a result of awareness of the green environmental crisis, ecological democracy has developed into a democracy that seeks to reflect back on the hubris of anthropocentrism (focus on humans).

A place for self-actualization is necessary for ecological democracy in the restoration of ex-mining excavated land (Jackson, 2021). To establish its theoretical limits, its anti-anthropocentric nature requires us to consider a type of non-strict democratic system. Liberal democracy is one of the many democratic theories and systems that exist today which have limited relationships between humans and living creatures and between private and public. Ecological democracy transcends the boundaries between humans and the environment through non-anthropocentrism, making it difficult for growth and development to be protected by liberal democracy in circumstances like this. Most concepts of ecological

democracy are argued to convey deliberative democracy, also known as deliberative democracy, which means it is a means that can accept and express ecological principles. In Law Number 32 of 2009 concerning Environmental Protection and Management, and quality of nature and ecosystems so that they can be useful again in an appropriate manner, Government Regulation Number 78 of 2010 concerning Reclamation and Environmental Change and Law Number 4 of 2009 concerning Mining Minerals and Coal. If the implementation of ecological democracy can be comprehensive in all mining in Indonesia, with environmental awareness, the rate of reforestation or reforestation on land that has been reclaimed for planting trees will increase, considering that Indonesia is one of the countries whose layout is close to the line. equator. Of course, it provides positive value in producing fertile tropical forests. Apart from that, communication or socialization is very effective and very important in ecological democracy. Deliberative democracy prioritizes reason over power and prioritizes the deliberative process as a principle of political correctness. In democracy, political legitimacy is not limited to large groups because the legitimacy of political power depends on the formation of community involvement with the same and independent position. Consequently, an important point in deliberative democracy is that public political participation is measured based on how actively they participate in deliberations. Therefore, democratic deliberation is not intended to represent or bring together different interests, but instead to be a place where problems are resolved through dialogue rather than using force, according to previous researchers in deliberation, principles and ideas that support the environment can be put forward. Acceptance of ecological thinking and values is more likely due to a deliberative democratic process that focuses more on wisdom and rationality. Deliberative democracy can eliminate democratic distortions such as loss of representation due to lobbying. Consequently, deliberative democracy, or deliberative democracy, can intrinsically be easily opened up to understandings ethically emerging in ecological reasoning. Therefore, if democracy wants to enter into an understanding of nature, then it is certain that deliberation (and not competition) is a determination in the structure and procedures in democratic decisions. In order for ecocracy to be implemented in a state system, the concept of ecocracy must be defined comprehensively (Handitya & Izziyana, 2023).

## CONCLUSION

Indonesia can no longer postpone its environmental emergency situation. Every party responsible for helping Indonesia emerge from this crisis must prioritize the environment as a concept in sustainable development. Negligence in land restoration/reclamation after mining operations in Indonesia is very high, even costing hundreds of lives. Even though there are clear regulations that require entrepreneurs to restore land through reforestation and the government carries out regular monitoring, these regulations are unable to force related parties to comply. The answer to the many violations of environmental law, especially post-mining reclamation in the field, is the idea of implementing eco-democracy, which provides environmental legal protection as a state tool, such as the ideas of democracy, nomocracy, and even theocracy. Through the green concept, or agreement with nature, it is a philosophy that best meets the requirements by focusing on the relationship between humans and the environment, which results in increased development efficiency without sacrificing environmental sustainability.

## REFERENCES

- Amir, Nabbilah, Mintia, Lady Grace Natalia, & Kharis, Tasya Maulina. (2019). *Responsibilities of Mining Entrepreneurs for Losses from Mining Activities in Indonesia (Case Study in Samarinda Province of East Kalimantan)*.
- Azis, Abd, & Bariun, La Ode. (2022). The Role of Local Government in Protecting the Management of Mineral Mining Companies and Controlling Environmental Impacts in East Kolaka Regency. *International Journal of Management and Education in Human Development*, 2(04), 626–642.
- Beck, Ulrich. (2018). *The reinvention of politics: Rethinking modernity in the global social order*. John Wiley & Sons.
- Bell, Simon. (2019). *Elements of visual design in the landscape*. Routledge. <https://doi.org/10.4324/9780367809935>
- Feng, Zhanjie, Hu, Zhenqi, Li, Gensheng, Zhang, Yuhang, Zhang, Xi, & Zhang, Hao. (2022). Improving mine reclamation efficiency for farmland sustainable use: Insights from optimizing mining scheme. *Journal of Cleaner Production*, 379, 134615. <https://doi.org/10.1016/j.jclepro.2022.134615>
- Gu, Jiali, Luo, Min, Zhang, Xiujuan, Christakos, George, Agusti, Susana, Duarte, Carlos M., & Wu, Jiaping. (2018). Losses of salt marsh in China: Trends, threats and management. *Estuarine, Coastal and Shelf Science*, 214, 98–109. <https://doi.org/10.1016/j.ecss.2018.09.015>
- Handitya, Binov, & Izziyana, Wafda Vivid. (2023). Political Reflection of Environmental Law Towards Regional Autonomy Law Products Holistic-Ecological Perspective. *Jurnal Justiciabelen*, 6(1), 1–13. <http://dx.doi.org/10.30587/justiciabelen.v6i1.6169>
- Haydock, Karen, & Srivastava, Himanshu. (2019). Environmental philosophies underlying the teaching of environmental education: A case study in India. *Environmental Education Research*, 25(7), 1038–1065. <https://doi.org/10.1080/13504622.2017.1402170>
- Jackson, Tim. (2021). *Post growth: Life after capitalism*. John Wiley & Sons.
- Kroll-Smith, J. Stephen, & Couch, Stephen Robert. (2014). *The real disaster is above ground: A mine fire and social conflict*. University Press of Kentucky.
- Muawanah, Umi, Yusuf, Gellwynn, Adrianto, Luky, Kalther, Jimmy, Pomeroy, Robert, Abdullah, Habibi, & Ruchimat, Toni. (2018). Review of national laws and regulation in Indonesia in relation to an ecosystem approach to fisheries management. *Marine Policy*, 91, 150–160. <https://doi.org/10.1016/j.marpol.2018.01.027>
- Mufidah, N. Zakiyyatul, & Habibi, Miftachur R. (2019). Konsep Ecocracy Sebagai Perlindungan Hukum Lingkungan Terhadap Pelanggaran Reklamasi Paska Penambangan. *Simposium Hukum Indonesia*, 1(1), 574–586.
- Pay, P. W. (2018). 1569 Perusahaan Tambang Disebut Belum Taruh Dana Reklamasi. Retrieved from CNN Indonesia website: <https://www.cnnindonesia.com/ekonomi/20181218200954-85-354707/1569-perusahaan-tambang-disebut-belum-taruh-dana-reklamasi> Desember 19

- Pettersson, Therése, Högladh, Stina, & Öberg, Magnus. (2019). Organized violence, 1989–2018 and peace agreements. *Journal of Peace Research*, 56(4), 589–603. <https://doi.org/10.1177/0022343319856046>
- Pratiwi, Narendra, Budi H., Siregar, Chairil A., Turjaman, Maman, Hidayat, Asep, Rachmat, Henti H., Mulyanto, Budi, Suwardi, Iskandar, & Maharani, Rizki. (2021). Managing and reforesting degraded post-mining landscape in Indonesia: A Review. *Land*, 10(6), 658. <https://doi.org/10.3390/land10060658>
- Ramadhan, Dani Berlan, & Arief, Shaffira Maharannie Putri Arkian. (2023). Constitutional Rights Guarantee and Integrated Licensing System for Sustainable Environmental Development in East Kalimantan. *Constitutionale*, 4(1), 49–60. <https://doi.org/10.25041/constitutionale.v4i1.2937>
- Syafii, Syafii, & Zamroni, M. (2018). Constitutional Rights And Legal Protection Agency Participant Of The Organizers Of The Social Security, Health Aspects Of Administrative Law. *Jurnal Reformasi Hukum: Cogito Ergo Sum*, 1(1), 35–44.
- Tsujino, Riyou, Yumoto, Takakazu, Kitamura, Shumpei, Djamaluddin, Ibrahim, & Darnaedi, Dedy. (2016). History of forest loss and degradation in Indonesia. *Land Use Policy*, 57, 335–347.