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[IJEEP] Submission Acknowledgement

2 messages

Ilhan OZTURK <ijeep@econjournals.com>

Sun, Sep 15, 2019 at 2:23 PM

To: Dr I Gede Bagus Suryawan <igbsuryawan.warmadewa@gmail.com>

Dr I Gede Bagus Suryawan:

Thank you for submitting the manuscript, "Strengthening Environmental Law Policy and Its Influence on Environmental Sustainability Performance: Empirical Studies of Green Constitution in Adopting Countries" to International Journal of Energy Economics and Policy. With the online journal management system that we are using, you will be able to track its progress through the editorial process by logging in to the journal web site:

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International Journal of Energy Economics and Policy

Editor, IJEEP

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Fri, Nov 15, 2019 at 2:07 PM

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Dear editor,

We have submitted the paper more than 2 month ago.
Can you provide the acceptance of paper.

We are looking forward to hearing from you.

Best regards,

I Bagus Suryawan

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3 messages

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----- Özgün İleti -----

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Tarih: 2019-10-12 18:50

Gönderen: International Journal of Energy Economics and Policy <ijeep@econjournals.com>

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Dear I Gusti Bagus Suryawan,

I am happy to inform you that your paper entitled "Strengthening Environmental Law Policy and Its Influence on Environmental Sustainability Performance: Empirical Studies of Green Constitution in Adopting Countries" has been accepted for publication in IJEEP for the next issue. Your paper will be send to you for final proof check very soon after payment received.

Thus, I would like to remind you to pay publication fee as soon as possible.

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Prof.Dr. Ilhan OZTURK

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please reply the questions arised in your paper and send me your answers.

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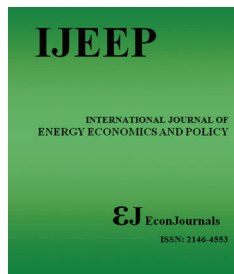
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Strengthening Environmental Law Policy and Its Influence on Environmental Sustainability Performance: Empirical Studies of Green Constitution in Adopting Countries

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ABSTRACT

Constitutional provisions concerning environmental protection have not specifically been regulated as expressive verbis in the Indonesian Constitution. In fact, the position of the environment has not been seated as a legal subject, and there is an absence of constitutional obligations for central government and local government and corporations and citizens, to protect the environment as a legal subject. Although Indonesia is very rich in natural resources, there are no provisions for constitutional procedures, such as constitutional complaint or suite action, and constitutional questions, to carry out environmental protection and the protection of environmental rights in constitutional courts or the supreme court. This study aims to explore the commitment of the State in its supreme law of constitution to carry out eco-constitutional reform agenda as the supreme action of the law to realize the ecocracy constitution as the new paradigm of environmental sovereignty. The results show that some countries have strengthened the position of living environments as a legal subject and placed it in their constitutions. However, if compared to the constitution of other countries, Indonesia's current constitution is very far behind the idea of eco-constitutionalism or ecocracy, such as the constitutions of Ecuador, Bolivia, Switzerland, Egypt, and France which explicitly supports the environment, like water, mountains, sea, rivers, forests, animals, as subjects of law and the State, corporation, and citizens are obliged to protect them.

Keywords: Natural Resources Policy, Ecocracy, Eco-constitutionalism Constitutional Design, Environmental Protection

JEL Classifications: ???

1. INTRODUCTION

Since the end of the 20th century, living environment and its sustainability have become special discourses in various countries in the world. This concerns environmental damage that threatens the quality of life of present and future generations (Engel and Mackey, 2011; Li, 2013). That reality, the urgency of environmental protection based on the constitution is a concern in various countries marked by the Stockholm declaration in 1972. After the declaration, the constitutionalisation movement was carried out massively for environmental protection. According to Shanthakumar (2018), there is a trend of developments in the

national legal system to impose constitutional obligations by the State and its citizens to protect the environment, for example Article 24 of the Greek Constitution 1975. Ashiddiqie (2009) in stating that the 1976 Portuguese Constitution was an example of a new constitution once, which specifically contains provisions regarding the state's obligation to protect the environment.

Shanthakumar's (2018) statement can be identified that Portugal is not the first country to institutionalize the environment after the 1972 Stocholm declaration as signaled by Ashiddiqie (2009). This is confirmed by the one cited by Mavrias and Spiliotopoulos (2004), and reinforced the argumentation of Boyd (2010), stating

that Greece in 1975 was one of the first countries in the world to make references to the environment in its constitution. So, the fact is that it is a fait accompli, the 1st time that introducing environmental protection into the constitution is the Greek State. Furthermore, constitutionalization related to the environment in various countries, for example South Africa (1996), Angola (1992), Armenia (1995), Netherlands (1983), Bhutan (2008), Brazil (1988), Chile (1980), Ecuador (2008), Philippines (1987), Ghana (1992), India (1976), South Korea (1987), Nepal (2007), France (2006), Portugal (1976), Spain (1978), Bolivia (2009), and so forth. Even from these countries, there are several countries that have strong protection for their environment, by way of constitutionalizing environmental norms into their constitution. For example, the Ecuador Constitution, which gives rights to the environment as subjects of law equal to human rights (Kahpi, 2016; Faiz, 2016).

The atavism concept if the constitutionalization movement is also done in Indonesia in the period of constitution amendment in 2000 to protect the environment as Article 28 H Paragraph (1) of the 1945 Constitution of the Republic of Indonesia. have the right to live in physical and spiritual prosperity, to live, and to get a good and healthy environment and the right to receive health services. However, the norm seems to still be a living environment as the ethical foundation of the philosophy of anthropocentrism. According to Merchant (1990), as an anthropocentric format for environmental rights to human beings. The argument further emphasizes that Article 28 H Paragraph (1) and Article 34, constitute an anthropocentrism type of environmental constitution. Merchant (1990) indication also has a correlation with Simeone (2006)'s opinion, even the US constitution is an anthropocentric constitution, because it considers only human health and well-being, not the environment "for its own sake." Furthermore, according to Simeone (2006), that such constitution is of the type of strong anthropocentrism which is also called a utilitarian view, more considerate of human interests and exclude non-human interests and environment, and only consider the short-term value of all ecosystem variables. In this view, it can be manipulated and used in any way that can be manipulated and used in humans.

With this paradigm, then it becomes the trigger for deviations in environmental protection that occur in the State of Indonesia. This, based on data from Nature Climate Change, that a year after the moratorium was issued, deforestation in Indonesia actually increased rapidly between 2000 and 2012, Indonesia lost 38% (6.02 million hectares of forest) annually. The rate of forest loss is almost as wide as Sri Lanka (Margono et al., 2014; Ingham, 2014). As a result of deforestation in Indonesia from 2006 to 2015 the country of Indonesia suffered a loss of 35.449 million USD (Primayogha et al., 2017). In addition, losses from other disasters caused by natural disasters, namely droughts, floods, storms, extreme temperatures, forest fires, landslides, volcanoes, earthquakes and tsunamis. In fact, Indonesia is one of the five most affected countries including China, the United States, India and the Philippines. For example, Indonesia contributed 30.1% of the total disaster events in 2016 from the four countries (Guha-Sapir et al., 2012). According to the National Disaster Management Agency, there are 8043 villages in Indonesia that are potentially

affected by the Tsunami in 2019 (Badan Nasional Penanggulangan Bencana [BNPB], 2019).

Based on the above explanation, it shows that even though there are two articles on environmental provisions in the 1945 constitution, but it is realized that these provisions still need to be strengthened and reaffirmed, when compared to environmental damage that is increasingly significant and compared to the constitutions of other countries, especially Ecuador, Bolivia, Switzerland, Egypt, France. The Indonesian constitution is classified as a country that is not too strict in regulating the constitutionality of environmental principles in it, marked by the environment as an object of fulfillment of mere economic interests. It is realized that the current constitutional norms (Article 28 H and Article 34 of Indonesian constitution) still need to be reaffirmed to strengthen the provisions of environmental protection to the level of the constitution, as evidence of a committed State and the obligation to protect the environment, from massive environmental damage. Likewise, if compared to the constitution of other countries, Indonesia's current constitution is very far behind the idea of eco-constitutionalism or ecocracy as the constitution of Ecuador, Bolivia, Switzerland, Egypt, France which explicitly supports the environment (both water, mountains, sea, rivers, forests, animals, etc.) as the subject of law. Herewith, the State, corporation, and citizens are obliged to protect it. In the future, Indonesia is very urge to carry out a constitutional movement of the idea of ecocracy, to strengthen the provisions of Article 28 H and Article 34 which are helpless when faced with economic greed by corporations as other environmental destroyers.

2. URGENCY OF ENVIRONMENTAL PROTECTION UNDER THE CONSTITUTION

The idea of environmental protection based on the constitution is inseparable from the idea of the ecocracy. The term ecocracy is arguably not an entirely new term. Since the late 1990s, various forums and mass media have begun to be viral about environmental issues, often used to describe the relationship between something and the idea of environmental protection (Ashiddiqie, 2009). The concept of ecocracy is based on principle, this state that: There are several trends in the concept of ecocracy. First, ecological trends, the growth in the protection of water, water, and important elements of the atmosphere of the atmosphere and human life. Second, cosmopolitan tendencies, are cosmopolitan feelings towards human goods, and humanity as a community, regardless of national boundaries and cultural differences. Third, the post-national trend, the acceptance of the surrender of a nation-state sovereignty features for global non-state regimes for the maintenance and protection of the general global environment (Hernández, 2015). The ecocracy idea embryo was first present at the Brundtland Report. Skolimowski (1975) stated that the conception of the economy is more about the recognition of the forces of nature and life in it, understanding of environmental limitations, elements of cooperation with nature, and most importantly creating a sustainable ecological system with respect to the earth and its contents and not seizing exploitatively without calculations (Faiz, 2016).

Table 1: Eco-constitutions and total CO₂ emissions

No.	Developing countries ¹	Starting year ²	Total CO ₂ emissions ³	Developed countries	Starting year	Total CO ₂ emissions
1.	India	1976	2076.83	Portugal	1976	47.37
2.	The Philippines	1987	114.75	Spain	1978	238.64
3.	Brazil	1988	416.69	Chile	1980	85.29
4.	Angola	1992	19.55	Netherlands	1983	157.07
5.	Ghana	1992	12.78	South Korea	1987	589.17
6.	Armenia	1995	4.87	France	2006	292.92
7.	South Africa	1996	414.37			
8.	Nepal	2007	8.50			
9.	Bhutan	2008	n/a			
10.	Ecuador	2008	35.02			
11.	Bolivia	2009	20.19			
Total ⁴			3123,55 ⁵	Total		1410,46

¹Classification refers to United Nations Development Programme, in Human Development Report 2018 – “Human Development Indices and Indicators” (PDF). Human Development Report Office United Nations Development Programme. pp. 22-25. ²Starting year of eco-constitutional rights as it was officially enacted in each country. ³Units: Mt CO₂ (in 2019). ⁴Excluded Bhutan as its data was not available in IEA World Energy. ⁵Although developing countries with eco-constitutionalism produce more CO₂ emissions, it should be noted that India contributes 66.48% of these emissions (2,078.83/3,123.55). Excluding India, total production was 1,044.72. ⁶Source: IEA World Energy Balances, 2019 - <https://webstore.iea.org/world-energy-balances-2019>

Table 2: Indonesia’s energy consumption (included biomass)

Classification	2012	2013	2014	2015	2016
Industrial	368,119,080	282,175,204	289,801,993	309,184,958	255,814,009
Households	349,084,289	360,016,142	369,893,470	373,786,746	378,046,006
Commercial	37,135,487	39,236,140	40,249,580	42,446,465	41,452,239
Transportation	329,520,051	341,409,711	342,781,960	307,077,749	303,307,071
Other	33,709,215	31,105,254	28,694,657	32,836,385	19,440,220
Non energy utilization	112,565,953	94,531,056	98,745,743	77,443,048	60,243,573
Final energy consumption	1,230,134,074	1,148,473,507	1,170,167,403	1,142,775,350	1,058,303,118

Source: Ministry of Energy and Mineral Resources Republic of Indonesia, 2017. Handbook of Energy and Economic Statistics of Indonesia. <https://www.esdm.go.id/assets/media/content/content-handbook-of-energy-economic-statistics-of-indonesia-2017-pdf>

Table 3: Tree cover gain in some countries

No.	Countries	Tree cover (MHa)	Global total (%)
1.	Canada	9.11	11.26
2.	Brazil	7.59	9.38
3.	Indonesia	6.96	8.60
4.	Malaysia	2.58	3.19
5.	China	2.54	3.14
6.	Other	52.15	64.44

Source: Global forest watch, <https://www.globalforestwatch.org/dashboards/country/> IDN. Global tree cover is about 80.93 MHa

Table 4: EPI of Indonesia 2010-2018

Indonesia	EPI of Indonesia				
	2010	2012	2014	2016	2018
EPI	114	74	112	107	133
Score	44.6	52.29	44.36	65.85	46.92

Source: Data Policymakers Summary of EPI by Yale Center for Environmental Law and Policy, Yale University, 2018. EPI: Environmental performance index

centered on living things entirely in relation to efforts to overcome environmental problems, while moral ethical principles view the environment and environmental governance (Keraf, 2006). DE was popularized in April 1984 which was elaborated by Naess and Sessions (1999) in response to concerns about environmental problems in the 1960s. DE has eight principles in looking at the environment, as follows: This concept rests on several important conceptions. First, the well-being and growth of human and nonhuman life on Earth has value in themselves. Second, the wealth and diversity of life forms contribute to the realization of these values as well as values in themselves, and humans have no right to reduce this wealth and diversity except to fulfill vital needs (Ambrosius, 2005).

This new paradigm is an embryo of the environmental constitutionalism movement in realizing the recognition that the environment is the right subject to be protected through constitutional content and also as the basis of constitutional court throughout the world to protect the environment (Daly and May, 2016). The fact that development of environmental constitutionalism is an effort to protect the environment and obedience of all actors (State and non-state). Environmental constitutionalism is the same as the term eco-constitutionalism, which is all forms of government obedience to fundamental ecological principles (Bosselmann, 2015). In that context, Daly and May (2016) state that most people on earth now live under a constitution that protects environmental rights in certain ways. To strengthen its argument, the fact in various countries

In that context, Capra (1996) offers a new paradigm of deep ecology (DE) as a response to environmental issues in a holistic manner, namely seeing the world as an integrated entity, namely a deep ethical and ecological foundation that recognizes nature and everything in it (humans, plants, animals, etc.) fundamental interdependence of all phenomena as individuals and society, ultimately depending on natural cycle processes (Capra, 1996). The idea of DE is also another name for ecocentrism as an antithesis of the ethical basis of anthropocentrism which is called shallow ecology. DE demands a new ethic that is not human centered, but

1 shows a commitment to environmental protection based on the
 2 constitution. For example, 76 countries recognize constitutional
 3 right to “quality,” “adequate,” “clean,” “healthy,” “productive,”
 4 “harmonious,” or “sustainable” environment. There are even 120
 5 constitutions in various countries or natural resources in some
 6 fashion, including water (63), land (62), fauna (59), minerals and
 7 mining (45), flora (42), biodiversity or ecosystem services (35),
 8 soil/subsoil (34), water (28), nature (27), energy (22), and other
 9 (17). Greece, for instance, specifically protects forests while Haiti
 10 protects its flora and fauna. Other nations, such as South Africa
 11 promote sustainable development.

12
 13 That reality proves that today’s modern state of environmental
 14 sovereignty can be identified in various countries that have
 15 institutionalized environmental norms that have relations
 16 with human rights in their constitution which have their own
 17 constitutional rights separate from constitutional rights of
 18 citizens. That, as a counterweight to the idea of democracy which
 19 considers the environment only as an object of exploitation for
 20 humans. According to Daly and May (2016) that environmental
 21 constitutionalism is a constitutional reform movement in
 22 various countries, massively after the 1980s by constituting
 23 the normalization of environmental norms explicitly into the
 24 constitution in various countries, for example, Armenia, Bolivia,
 25 Ecuador, Dominican Republic, France, Guinea, Hungary, Jamaica,
 26 Kenya, Maldives, Maldives, Madagascar, Montenegro, Myanmar,
 27 Nepal, Rwanda, Serbia, South Sudan, Sudan and Turkmenistan
 28 (Daly and May, 2006). According to Boyd (2010) from the results
 29 of his research which states the following that the provisions of
 30 the constitutional environment are now the norm in most parts
 31 of the world, including Western and Eastern Europe, Asia, Latin
 32 America and Africa, with 149 of the 193 countries incorporating
 33 environmental protection provisions in national constitution as of
 34 2013. In fact, the phenomenon of constitutionalization movement
 35 is a popouler way to protect the environment from the level act to
 36 the constitution as the supreme law level.

37
 38 This phenomenon in the domestic context, according to Kotzé
 39 (2012), environmental concerns have recently “increased” from
 40 the usual legal level to high. Constitutional strengthening of the
 41 environment according to Boyd (2010), at least this includes
 42 constitutionalizing norms related to substantive rights to
 43 environmental quality, procedural rights related to environmental
 44 quality, the government’s duty to protect the environment,
 45 duties or individual responsibilities to protect the environment,
 46 and other environmental protection provisions. This, according
 47 to Kotze (2012), aims to provide opportunities for reform,
 48 environmental governance, environmental maintenance
 49 priorities, encourage procedural aspects of environmental
 50 governance, actor participation and state accountability, provide
 51 a legal basis and means to create and enforce environmental
 52 rules, and establish moral obligations and ethics with regard
 53 to the environment and the public and private foundation (Kotzé,
 54 2012). Bruch (2000) who say that environmental protection
 55 through the constitution for: First, environmental provisions
 56 based on the constitution can provide a “safety net” to solve
 57 environmental problems that cannot be protected under the law
 58 and make the constitution the basis for the establishment of

Figure 1: Energy consumption per sector in 2016

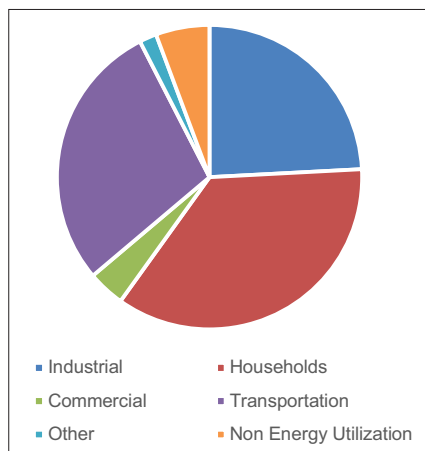
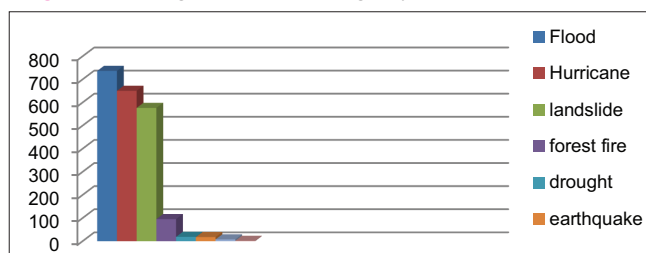


Figure 2: Ecological disaster emergency status data in Indonesia



Source: Wahana Lingkungan Hidup Indonesia (WALHI) dan BNPB, 2018

laws and regulations under it. Second, constitutional provisions regarding the protection of life can strengthen the status of environmental protection, which is often overlooked and excluded from the interests of economic development which is always seen as a priority. In addition, it also provides a strong basis for environmental protection against political policies that have implications for environmental damage. Third, the provisions of the Constitution form the basis of the constitutional rights needed for environmental organizations and other citizens as their legal standing as plaintiffs in the court to guarantee access to information, public participation in the environment, to carry out movements to protect the substantive rights of the community to obtain life and environment healthy and participate to form the foundation of environmental governance.

Constitutionalism is important for environmental protection because it provides a way to defend the rights and interests of the environment to limit the authority and violations of all actors to environmental rights and interests, and to force the state and even non-state actors to act constitutionally to respect, protect, promote and fulfill environmental interests (Kotzé, 2012). In Equador, citizens sued the State, as in the case where the Loja provincial government for pollution or degradation of the river’s environment in Vilcabamba due to road widening projects in Loja Province. Likewise with Chevron, where even though citizens are not affected and do not experience material losses due to pollution, they are given the right to sue (Greene, 2011). The case was decided at the Provincial Justice Court of Loja, March 30, 2011. The ruling acknowledged the plaintiff’s right to sue under Article 71 of the constitution, which stipulates the right of every citizen

1 or state to prosecute the authorities of compliance with natural
2 rights. The ruling recognizes natural rights as a constitutional right
3 to be considered and emphasizes that every citizen can defend
4 these rights in court when violated (Pecharroman, 2018). Citizens
5 in Ecuador, can make a lawsuit in the name of environmental
6 pollution even if they do not experience direct losses. not only in
7 the case of the river in Vilcabamba, it also happened in the case
8 of Texaco (Chevron) which damaged Amazon in Ecuador. During
9 operations between 1964 and 1992, Texaco drilled 339 wells
10 in 15 oil fields and 627 poisoned abandoned wastewater holes,
11 along with other elements of petroleum infrastructure. In addition,
12 outdated and highly polluting technology was used during these
13 exploitation years. Deforestation of 2 million hectares of land is
14 caused for oil operations in the northern Ecuadorian Amazon,
15 as well as large water contamination with toxic substances and
16 heavy metals (Pigrau, 2014; Jayatilaka, 2017). Similar problems
17 in Ecuador occur in India and Argentina, such as in the case of
18 Ganges in India and Riachuelo in Argentina (Quina, 2017).

20 This is quite different from the Indonesian state constitution,
21 has regulated the right to a healthy environment in Article 28 H
22 paragraph (1) which stipulates that everyone has the right to live
23 physically and mentally prosperous, to live and obtain a good
24 and healthy environment and the right to obtain health services.
25 For the sustainable development aspect Article 33 paragraph
26 (4) regulating the national economy is based on economic
27 democracy with the principle of togetherness, efficiency, justice,
28 sustainability, environmental insight, independence, and by
29 maintaining a balance of progress and unity of the national
30 economy. However, state and non-state responsibilities to protect
31 the environment are not contained in the Indonesian constitution
32 as well as individual responsibility for environmental protection
33 as well as in the Constitution of 192 constitutions in various
34 countries. This has relevance with the opinion of Boyd (2010),
35 stating that the phenomenon of the constitutionalisation of
36 constitutional provisions about State and non-state responsibility
37 for commitment to protect the environment is precisely the amount
38 that is far lower than the number of constitutions that recognize
39 the right to live in healthy environment. The condition according
40 to Jimly Ashiddiqie, that the green nuances of the Indonesian
41 1945 Constitution are still less sensitive to environmental issues
42 (Ashiddiqie, 2009). Therefore, it is necessary to think about the
43 possibility to further green the colors of the 1945 Constitution of
44 the Republic of Indonesia. Ashiddiqie (2009) opinion seems to
45 be a response to conditions of environmental degradation due to
46 development that is not environmentally sound and sustainable.
47 Thus, the argument seems to have relevance to the opinion of
48 Ruli (1999), which states when the rule of law is undermined,
49 both the economy and the whole system grows sick. Realizing
50 rule of law in the context of environmental protection, requires
51 commitment through political movements and law (constitutional
52 amendment movement). According to Li (2013), the most effective
53 political and legal movements are to support the environmental
54 protection regime based on the future constitution. According to
55 the Indonesian Forum for the Environment (Walhi, 2018), the most
56 important environmental advocate in Indonesia, that State actors
57 (Government) are still carrying out a double-faced policy, on the
58 one hand populist expressing their partiality to the people, but its

1 implementation is still dominant in favor of investment interests.
2 In addition, we know North Sumatra, South Sumatra, West Java,
3 East Java, Riau Papua, East Kalimantan, Southeast Sulawesi, NTB
4 are areas that have abundant mining resources.
5

6 In addition, in several provinces such as NTT, West Kalimantan
7 and North Maluku, the regions are targeted to expand large-scale
8 monoculture plantations, such as acacia, oil palm and sugarcane,
9 which are vulnerable to environmental deforestation. In 2008-
10 2009 and 2013-2014, there was a trend of large-scale forest area
11 release for the legalization of environmental destruction for
12 plantations and mining. Walhi predicts licensing in the mining
13 sector will be in 2018. This proves that environmental protection
14 is not enough only through means of act and only contains the
15 norm provisions that “everyone has the right to live in a healthy
16 environment” which is anthropocentric. However, having to get
17 the status of strengthening the protection through the constitution
18 of the economy to protect the environment explicitly based on the
19 constitution requires political and legal commitment to carry out
20 constitutional amendments.

3. ENVIRONMENTAL PROTECTION EFFORTS UNDER THE STATE CONSTITUTION

27 The latest facts related to the issue of the status of environmental
28 emergencies in Indonesia, based on the Environmental
29 Performance Index (EPI), that the results of measurement of
30 environmental management performance in Indonesia are ranked
31 133 by getting an index score of 46.92, in contrast to Switzerland
32 which ranks (EPI, 2018). Strengthened by the fact that the
33 emergency status of the rainforest environment in primary forests
34 for oil palm management, mining and logging from 2000-2015
35 shows more than 4.5 million hectares of deforestation (Wijaya
36 et al., 2017). Furthermore, the two biggest contributors to forest
37 loss in Indonesia are logging and corporations in the oil palm
38 sector. That fact, according to Attfield (2010), is that there is a
39 correlation between abundant natural resources and environmental
40 degradation such as deforestation, because deforestation is a
41 way for countries to earn economic income. The fact that the is
42 increasingly emphasizing Indonesia is the country that contributes
43 most to forest destruction besides Brazil, India, Mexico and
44 Nigeria, as a “logging union” (Attfield, 2010).

46 The fact of deforestation, according to Vidal (2013) is the
47 biggest deforestation in Indonesia in the regions of Sumatra and
48 Kalimantan. Rainforest is damaged by loggers and the paper
49 industry. As a result of the exploitation and exploration of the
50 rainforest, for example to show the loss of the fastest forest cover
51 in the humid tropics. Furthermore, according to Vidal (2013), this
52 has implications for carbon loss, biodiversity conservation, and
53 livelihoods of local residents.

55 Based on these statistics, according to BNPB there were 2175 disaster
56 events in Indonesia, with details of floods (737), tornadoes (651),
57 landslides (577), forest and land fires (96), floods and landslides
58 (67), drought (19), earthquakes (18), abrasion (8), and volcanic

eruptions (2). To strengthen the argumentation of the high number of disasters in Indonesia, based on data from the United Nations Office for Disaster Risk Reduction, stated that the five countries were hit by the highest number of disasters were the United States, China, India, the Philippines and Indonesia, (<https://www.unisdr.org/we/advocate/climate-change>, 2015) shows that at present Indonesia is in an emergency condition of clean water.

Statistics on pollution and river conditions show that 73.24% of rivers are heavily polluted, and only 26.76% which is worth consumption. The data illustrates the condition of large rivers where many Indonesians who live in the area and depend on the river for their conditions are heavily polluted. The river is a source of clean water for bathing, washing, agriculture, livestock and also industry, for example pollution of the Citarum and Cijung rivers (Wahana Lingkungan Hidup/WALHI, 2018). Whereas, the preservation of the environment and natural resources is a major challenge for the economic growth agenda inclusive and sustainable in Indonesia that needs more water for drinking, cleaning and food production. The problem of endemic pollution that has implications and has a low impact on water quality and the massive “movement” of pollution in Indonesia is a problem that is also experienced in various other developing countries that are symmetrical with the pace of industrialization and urbanization, for example, India (Helmer and Hespanhol, 1997). Apart from environmental emergencies from aspects of ecological disasters, deforestation and river pollution. Another aspect of environmental emergency is the lack of State consent to environmental management and protection which is its obligatory constitutionality to measure the State’s commitment in the management and protection of Indonesia’s environmental sustainability.

The status of the EPI for Indonesia is measured based on 10 indicators, as follows: (1) Environmental health; (2) water effects on human health; (3) water pollution (effects on human health); (4) air pollution (ecosystem effects); (5) water resources (ecosystem effects); (6) biodiversity and habitat; (7) forests; (8) fisheries; (9) agriculture; (10) climate change. Based on the data, it shows that the low commitment of the State in relation to the environmental issue as evidenced by the EPI rankings stagnated and the decline in Indonesia’s ranking in 2018 was ranked 133 out of 180 countries in the world. The health environment rating for Indonesia is ranked 135 out of 180 countries. That, shows that the environment is very necessary to get serious political and legal attention for strengthening environmental protection through the constitutionalisation of the idea of the ecocracy. Reality shows that it is increasingly strengthening the argumentation for the agenda of strengthening the status of environmental protection based on a constitution that does not only look at the environment or the universe as an object to fulfill human greed and fulfillment of mere economic growth.

4. CONCLUSION

This study confirms that although the Indonesian Constitution has adopted environmental rights and sustainable concept based on Article 28 H and Article 34, constitutional provisions concerning environmental protection, are not specifically regulated and

expressive verbis. In fact, the position of the environment has not been seated as a legal subject that must be strictly protected under the constitution. Likewise with the provisions of the constitutional procedure for environmental protection and environmental rights in the Court, there are no provisions for constitutional procedures, such as constitutional complaint or suite action, and constitutional questions, to carry out environmental protection and the protection of environmental rights in constitutional courts or the supreme court.

In addition, the absence of constitutional obligations for every legal subject (central government and local government and corporations and citizens) to protect other legal subjects in case the environment whose existence is a place to depend on the existence of human life and other ecosystems on now generation and the future generation will be detrimental for the ecological, economic, and socio-cultural interests. In the future, Indonesia is very urge to carry out a constitutional movement of the idea of ecocracy, to strengthen the provisions of Article 28 H and Article 34 which are helpless when faced with economic greed by corporations as other environmental destroyers. Thus, the commitment of the State and citizens is needed to carry out constitutional reform agenda as the supreme of the law to realize the ecocracy constitution as the new paradigm of environmental sovereignty, because it is realized that the current constitutional norms (Article 28 H and Article 34) still need to be reaffirmed to strengthen the provisions of environmental protection to the level of the constitution, as evidence of a committed State and the obligation to protect the environment, from massive environmental damage. Likewise, if compared to the constitution of other countries, Indonesia’s current constitution is very far behind the idea of eco-constitutionalism or ecocracy as the constitution of Ecuador, Bolivia, Switzerland, Egypt, France which explicitly supports the environment (both water, mountains, sea, rivers, forests, animals, etc.) as subjects of law and the State, corporation, and citizens are obliged to protect them.

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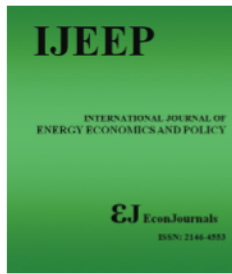
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Strengthening Environmental Law Policy and Its Influence on Environmental Sustainability Performance: Empirical Studies of Green Constitution in Adopting Countries

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ABSTRACT

Constitutional provisions concerning environmental protection have not specifically been regulated as expressive verbis in the Indonesian Constitution. In fact, the position of the environment has not been seated as a legal subject, and there is an absence of constitutional obligations for central government and local government and corporations and citizens, to protect the environment as a legal subject. Although Indonesia is very rich in natural resources, there are no provisions for constitutional procedures, such as constitutional complaint or suite action, and constitutional questions, to carry out environmental protection and the protection of environmental rights in constitutional courts or the supreme court. This study aims to explore the commitment of the State in its supreme law of constitution to carry out eco-constitutional reform agenda as the supreme action of the law to realize the ecocracy constitution as the new paradigm of environmental sovereignty. The results show that some countries have strengthened the position of living environments as a legal subject and placed it in their constitutions. However, if compared to the constitution of other countries, Indonesia's current constitution is very far behind the idea of eco-constitutionalism or ecocracy, such as the constitutions of Ecuador, Bolivia, Switzerland, Egypt, and France which explicitly supports the environment, like water, mountains, sea, rivers, forests, animals, as subjects of law and the State, corporation, and citizens are obliged to protect them.

Keywords: Natural Resources Policy, Ecocracy, Eco-constitutionalism Constitutional Design, Environmental Protection

JEL Classifications: K32, Q56

1. INTRODUCTION

Since the end of the 20th century, living environment and its sustainability have become special discourses in various countries in the world. This concerns environmental damage that threatens the quality of life of present and future generations (Engel and Mackey, 2011; Li, 2013). That reality, the urgency of environmental protection based on the constitution is a concern in various countries marked by the Stockholm declaration in 1972. After the declaration, the constitutionalisation movement was carried out massively for environmental protection. According to Shanthakumar (2018), there is a trend of developments in the

national legal system to impose constitutional obligations by the State and its citizens to protect the environment, for example Article 24 of the Greek Constitution 1975. Ashiddiqie (2009) in stating that the 1976 Portuguese Constitution was an example of a new constitution once, which specifically contains provisions regarding the state's obligation to protect the environment.

Shanthakumar's (2018) statement can be identified that Portugal is not the first country to institutionalize the environment after the 1972 Stockholm declaration as signaled by Ashiddiqie (2009). This is confirmed by the one cited by Mavrias and Spiliotopoulos (2004), and reinforced the argumentation of Boyd (2010), stating

that Greece in 1975 was one of the first countries in the world to make references to the environment in its constitution. So, the fact is that it is a *fait accompli*, the 1st time that introducing environmental protection into the constitution is the Greek State. Furthermore, constitutionalization related to the environment in various countries, for example South Africa (1996), Angola (1992), Armenia (1995), Netherlands (1983), Bhutan (2008), Brazil (1988), Chile (1980), Ecuador (2008), Philippines (1987), Ghana (1992), India (1976), South Korea (1987), Nepal (2007), France (2006), Portugal (1976), Spain (1978), Bolivia (2009), and so forth Table 1. Even from these countries, there are several countries that have strong protection for their environment, by way of constitutionalizing environmental norms into their constitution. For example, the Ecuador Constitution, which gives rights to the environment as subjects of law equal to human rights (Kahpi, 2016; Faiz, 2016).

The atavism concept if the constitutionalization movement is also done in Indonesia in the period of constitution amendment in 2000 to protect the environment as Article 28 H Paragraph (1) of the 1945 Constitution of the Republic of Indonesia. have the right to live in physical and spiritual prosperity, to live, and to get a good and healthy environment and the right to receive health services. However, the norm seems to still be a living environment as the ethical foundation of the philosophy of anthropocentrism. According to Merchant (1990), as an anthropocentric format for environmental rights to human beings. The argument further emphasizes that Article 28 H Paragraph (1) and Article 34, constitute an anthropocentrism type of environmental constitution.

Merchant (1990) indication also has a correlation with Simeone (2006)'s opinion, even the US constitution is an anthropocentric constitution, because it considers only human health and well-being, not the environment "for its own sake." Furthermore, according to Simeone (2006), that such constitution is of the type of strong anthropocentrism which is also called a utilitarian view, more considerate of human interests and exclude non-human interests and environment, and only consider the short-term value of all ecosystem variables. In this view, it can be manipulated and used in any way that can be manipulated and used in humans.

With this paradigm, then it becomes the trigger for deviations in environmental protection that occur in the State of Indonesia. This, based on data from Nature Climate Change, that a year after the moratorium was issued, deforestation in Indonesia actually increased rapidly between 2000 and 2012, Indonesia lost 38% (6.02 million hectares of forest) annually. The rate of forest loss is almost as wide as Sri Lanka (Margono et al., 2014; Ingham, 2014). As a result of deforestation in Indonesia from 2006 to 2015 the country of Indonesia suffered a loss of 35.449 million USD (Primayogha et al., 2017) Tables 2 and 3. In addition, losses from other disasters caused by natural disasters, namely droughts, floods, storms, extreme temperatures, forest fires, landslides, volcanoes, earthquakes and tsunamis Table 4. In fact, Indonesia is one of the five most affected countries including China, the United States, India and the Philippines. For example, Indonesia contributed 30.1% of the total disaster events in 2016 from the four countries (Guha-Sapir et al., 2012). According to the National Disaster Management Agency, there are 8043 villages in Indonesia

Table 1: Eco-constitutions and total CO₂ emissions

No.	Developing countries ¹	Starting year ²	Total CO ₂ emissions ³	Developed countries	Starting year	Total CO ₂ emissions
1.	India	1976	2076.83	Portugal	1976	47.37
2.	The Philippines	1987	114.75	Spain	1978	238.64
3.	Brazil	1988	416.69	Chile	1980	85.29
4.	Angola	1992	19.55	Netherlands	1983	157.07
5.	Ghana	1992	12.78	South Korea	1987	589.17
6.	Armenia	1995	4.87	France	2006	292.92
7.	South Africa	1996	414.37			
8.	Nepal	2007	8.50			
9.	Bhutan	2008	n/a			
10.	Ecuador	2008	35.02			
11.	Bolivia	2009	20.19			
Total ⁴			3123,55 ⁵	Total		1410,46

¹Classification refers to United Nations Development Programme, in Human Development Report 2018 – "Human Development Indices and Indicators" (PDF). Human Development Report Office United Nations Development Programme. pp. 22-25. ²Starting year of eco-constitutional rights as it was officially enacted in each country. ³Units: Mt CO₂ (in 2019). ⁴Excluded Bhutan as its data was not available in IEA World Energy. ⁵Although developing countries with eco-constitutionalism produce more CO₂ emissions, it should be noted that India contributes 66.48% of these emissions (2,078.83/3,123.55). Excluding India, total production was 1,044.72. ⁶Source: IEA World Energy Balances, 2019 - <https://webstore.iea.org/world-energy-balances-2019>

Table 2: Indonesia's energy consumption (included biomass)

Classification	2012	2013	2014	2015	2016
Industrial	368,119,080	282,175,204	289,801,993	309,184,958	255,814,009
Households	349,084,289	360,016,142	369,893,470	373,786,746	378,046,006
Commercial	37,135,487	39,236,140	40,249,580	42,446,465	41,452,239
Transportation	329,520,051	341,409,711	342,781,960	307,077,749	303,307,071
Other	33,709,215	31,105,254	28,694,657	32,836,385	19,440,220
Non energy utilization	112,565,953	94,531,056	98,745,743	77,443,048	60,243,573
Final energy consumption	1,230,134,074	1,148,473,507	1,170,167,403	1,142,775,350	1,058,303,118

Source: Ministry of Energy and Mineral Resources Republic of Indonesia, 2017. Handbook of Energy and Economic Statistics of Indonesia. <https://www.esdm.go.id/assets/media/content/content-handbook-of-energy-economic-statistics-of-indonesia-2017-pdf>

Table 3: Tree cover gain in some countries

No.	Countries	Tree cover (MHa)	Global total (%)
1.	Canada	9.11	11.26
2.	Brazil	7.59	9.38
3.	Indonesia	6.96	8.60
4.	Malaysia	2.58	3.19
5.	China	2.54	3.14
6.	Other	52.15	64.44

Source: Global forest watch, <https://www.globalforestwatch.org/dashboards/country/>
IDN. Global tree cover is about 80.93 MHa

Table 4: EPI of Indonesia 2010-2018

Indonesia	EPI of Indonesia				
	2010	2012	2014	2016	2018
EPI	114	74	112	107	133
Score	44.6	52.29	44.36	65.85	46.92

Source: Data Policymakers Summary of EPI by Yale Center for Environmental Law and Policy, Yale University, 2018. EPI: Environmental performance index

that are potentially affected by the Tsunami in 2019 (Badan Nasional Penanggulangan Bencana [BNPB], 2019).

Based on the above explanation, it shows that even though there are two articles on environmental provisions in the 1945 constitution, but it is realized that these provisions still need to be strengthened and reaffirmed, when compared to environmental damage that is increasingly significant and compared to the constitutions of other countries, especially Ecuador, Bolivia, Switzerland, Egypt, France. The Indonesian constitution is classified as a country that is not too strict in regulating the constitutionality of environmental principles in it, marked by the environment as an object of fulfillment of mere economic interests. It is realized that the current constitutional norms (Article 28 H and Article 34 of Indonesian constitution) still need to be reaffirmed to strengthen the provisions of environmental protection to the level of the constitution, as evidence of a committed State and the obligation to protect the environment, from massive environmental damage. Likewise, if compared to the constitution of other countries, Indonesia's current constitution is very far behind the idea of eco-constitutionalism or ecocracy as the constitution of Ecuador, Bolivia, Switzerland, Egypt, France which explicitly supports the environment (both water, mountains, sea, rivers, forests, animals, etc.) as the subject of law. Herewith, the State, corporation, and citizens are obliged to protect it. In the future, Indonesia is very urge to carry out a constitutional movement of the idea of ecocracy, to strengthen the provisions of Article 28 H and Article 34 which are helpless when faced with economic greed by corporations as other environmental destroyers.

2. URGENCY OF ENVIRONMENTAL PROTECTION UNDER THE CONSTITUTION

The idea of environmental protection based on the constitution is inseparable from the idea of the ecocracy. The term ecocracy is arguably not an entirely new term. Since the late 1990s, various forums and mass media have begun to be viral about environmental issues, often used to describe the relationship between something and the idea of environmental protection (Ashiddiqie, 2009). The

concept of ecocracy is based on principle, this state that: There are several trends in the concept of ecocracy. First, ecological trends, the growth in the protection of water, water, and important elements of the atmosphere of the atmosphere and human life. Second, cosmopolitan tendencies, are cosmopolitan feelings towards human goods, and humanity as a community, regardless of national boundaries and cultural differences. Third, the post-national trend, the acceptance of the surrender of a nation-state sovereignty features for global non-state regimes for the maintenance and protection of the general global environment (Hernández, 2015). The ecocracy idea embryo was first present at the Brundtland Report. Skolimowski (1975) stated that the conception of the economy is more about the recognition of the forces of nature and life in it, understanding of environmental limitations, elements of cooperation with nature, and most importantly creating a sustainable ecological system with respect to the earth and its contents and not seizing exploitatively without calculations (Faiz, 2016).

In that context, Capra (1996) offers a new paradigm of deep ecology (DE) as a response to environmental issues in a holistic manner, namely seeing the world as an integrated entity, namely a deep ethical and ecological foundation that recognizes nature and everything in it (humans, plants, animals, etc.) fundamental interdependence of all phenomena as individuals and society, ultimately depending on natural cycle processes (Capra, 1996). The idea of DE is also another name for ecocentrism as an antithesis of the ethical basis of anthropocentrism which is called shallow ecology. DE demands a new ethic that is not human centered, but centered on living things entirely in relation to efforts to overcome environmental problems, while moral ethical principles view the environment and environmental governance (Keraf, 2006). DE was popularized in April 1984 which was elaborated by Naess and Sessions (1999) in response to concerns about environmental problems in the 1960s. DE has eight principles in looking at the environment, as follows: This concept rests on several important conceptions. First, the well-being and growth of human and nonhuman life on Earth has value in themselves. Second, the wealth and diversity of life forms contribute to the realization of these values as well as values in themselves, and humans have no right to reduce this wealth and diversity except to fulfill vital needs (Ambrosius, 2005).

This new paradigm is an embryo of the environmental constitutionalism movement in realizing the recognition that the environment is the right subject to be protected through constitutional content and also as the basis of constitutional court throughout the world to protect the environment (Daly and May, 2016). The fact that development of environmental constitutionalism is an effort to protect the environment and obedience of all actors (State and non-state). Environmental constitutionalism is the same as the term eco-constitutionalism, which is all forms of government obedience to fundamental ecological principles (Bosselmann, 2015). In that context, Daly and May (2016) state that most people on earth now live under a constitution that protects environmental rights in certain ways. To strengthen its argument, the fact in various countries shows a commitment to environmental protection based on the

constitution. For example, 76 countries recognize constitutional right to “quality,” “adequate,” “clean,” “healthy,” “productive,” “harmonious,” or “sustainable” environment. There are even 120 constitutions in various countries or natural resources in some fashion, including water (63), land (62), fauna (59), minerals and mining (45), flora (42), biodiversity or ecosystem services (35), soil/subsoil (34), water (28), nature (27), energy (22), and other (17). Greece, for instance, specifically protects forests while Haiti protects its flora and fauna. Other nations, such as South Africa promote sustainable development.

That reality proves that today’s modern state of environmental sovereignty can be identified in various countries that have institutionalized environmental norms that have relations with human rights in their constitution which have their own constitutional rights separate from constitutional rights of citizens. That, as a counterweight to the idea of democracy which considers the environment only as an object of exploitation for humans. According to Daly and May (2016) that environmental constitutionalism is a constitutional reform movement in various countries, massively after the 1980s by constituting the normalization of environmental norms explicitly into the constitution in various countries, for example, Armenia, Bolivia, Ecuador, Dominican Republic, France, Guinea, Hungary, Jamaica, Kenya, Maldives, Madagascar, Montenegro, Myanmar, Nepal, Rwanda, Serbia, South Sudan, Sudan and Turkmenistan (Daly and May, 2006). According to Boyd (2010) from the results of his research which states the following that the provisions of the constitutional environment are now the norm in most parts of the world, including Western and Eastern Europe, Asia, Latin America and Africa, with 149 of the 193 countries incorporating environmental protection provisions in national constitution as of 2013. In fact, the phenomenon of constitutionalization movement is a popular way to protect the environment from the level act to the constitution as the supreme law level.

This phenomenon in the domestic context, according to Kotzé (2012), environmental concerns have recently “increased” from the usual legal level to high. Constitutional strengthening of the environment according to Boyd (2010), at least this includes constitutionalizing norms related to substantive rights to environmental quality, procedural rights related to environmental quality, the government’s duty to protect the environment, duties or individual responsibilities to protect the environment, and other environmental protection provisions. This, according to Kotzé (2012), aims to provide opportunities for reform, environmental governance, environmental maintenance priorities, encourage procedural aspects of environmental governance, actor participation and state accountability, provide a legal basis and means to create and enforce environmental rules, and establish moral obligations and ethics with regard to the environment and the public and private foundation (Kotzé, 2012). Bruch (2000) who say that environmental protection through the constitution for: First, environmental provisions based on the constitution can provide a “safety net” to solve environmental problems that cannot be protected under the law and make the constitution the basis for the establishment of laws and regulations under it. Second, constitutional provisions

regarding the protection of life can strengthen the status of environmental protection, which is often overlooked and excluded from the interests of economic development which is always seen as a priority. In addition, it also provides a strong basis for environmental protection against political policies that have implications for environmental damage. Third, the provisions of the Constitution form the basis of the constitutional rights needed for environmental organizations and other citizens as their legal standing as plaintiffs in the court to guarantee access to information, public participation in the environment, to carry out movements to protect the substantive rights of the community to obtain life and environment healthy and participate to form the foundation of environmental governance.

Constitutionalism is important for environmental protection because it provides a way to defend the rights and interests of the environment to limit the authority and violations of all actors to environmental rights and interests, and to force the state and even non-state actors to act constitutionally to respect, protect, promote and fulfill environmental interests (Kotzé, 2012). In Ecuador, citizens sued the State, as in the case where the Loja provincial government for pollution or degradation of the river’s environment in Vilcabamba due to road widening projects in Loja Province. Likewise with Chevron, where even though citizens are not affected and do not experience material losses due to pollution, they are given the right to sue (Greene, 2011). The case was decided at the Provincial Justice Court of Loja, March 30, 2011. The ruling acknowledged the plaintiff’s right to sue under Article 71 of the constitution, which stipulates the right of every citizen or state to prosecute the authorities of compliance with natural rights. The ruling recognizes natural rights as a constitutional right to be considered and emphasizes that every citizen can defend these rights in court when violated (Pecharroman, 2018). Citizens in Ecuador, can make a lawsuit in the name of environmental pollution even if they do not experience direct losses. not only in the case of the river in Vilcabamba, it also happened in the case of Texaco (Chevron) which damaged Amazon in Ecuador. During operations between 1964 and 1992, Texaco drilled 339 wells in 15 oil fields and 627 poisoned abandoned wastewater holes, along with other elements of petroleum infrastructure. In addition, outdated and highly polluting technology was used during these exploitation years. Deforestation of 2 million hectares of land is caused for oil operations in the northern Ecuadorian Amazon, as well as large water contamination with toxic substances and heavy metals (Pigrau, 2014; Jayatilaka, 2017). Similar problems in Ecuador occur in India and Argentina, such as in the case of Ganges in India and Riachuelo in Argentina (Quina, 2017).

This is quite different from the Indonesian state constitution, has regulated the right to a healthy environment in Article 28 H paragraph (1) which stipulates that everyone has the right to live physically and mentally prosperous, to live and obtain a good and healthy environment and the right to obtain health services. For the sustainable development aspect Article 33 paragraph (4) regulating the national economy is based on economic democracy with the principle of togetherness, efficiency, justice, sustainability, environmental insight, independence, and by maintaining a balance of progress and unity of the national

economy. However, state and non-state responsibilities to protect the environment are not contained in the Indonesian constitution as well as individual responsibility for environmental protection as well as in the Constitution of 192 constitutions in various countries. This has relevance with the opinion of Boyd (2010), stating that the phenomenon of the constitutionalisation of constitutional provisions about State and non-state responsibility for commitment to protect the environment is precisely the amount that is far lower than the number of constitutions that recognize the right to live in healthy environment. The condition according to Jimly Ashiddiqie, that the green nuances of the Indonesian 1945 Constitution are still less sensitive to environmental issues (Ashiddiqie, 2009). Therefore, it is necessary to think about the possibility to further green the colors of the 1945 Constitution of the Republic of Indonesia. Ashiddiqie (2009) opinion seems to be a response to conditions of environmental degradation due to development that is not environmentally sound and sustainable. Thus, the argument seems to have relevance to the opinion of Ruli (1999), which states when the rule of law is undermined, both the economy and the whole system grows sick. Realizing rule of law in the context of environmental protection, requires commitment through political movements and law (constitutional amendment movement). According to Li (2013), the most effective political and legal movements are to support the environmental protection regime based on the future constitution. According to the Indonesian Forum for the Environment (Walhi, 2018), the most important environmental advocate in Indonesia, that State actors (Government) are still carrying out a double-faced policy, on the one hand populist expressing their partiality to the people, but its implementation is still dominant in favor of investment interests. In addition, we know North Sumatra, South Sumatra, West Java, East Java, Riau Papua, East Kalimantan, Southeast Sulawesi, NTB are areas that have abundant mining resources Figure 1.

In addition, in several provinces such as NTT, West Kalimantan and North Maluku, the regions are targeted to expand large-scale monoculture plantations, such as acacia, oil palm and sugarcane, which are vulnerable to environmental deforestation. In 2008-2009 and 2013-2014, there was a trend of large-scale forest area release for the legalization of environmental destruction for plantations and mining. Walhi predicts licensing in the mining sector will be in 2018. This proves that environmental protection

is not enough only through means of act and only contains the norm provisions that “everyone has the right to live in a healthy environment” which is anthropocentric. However, having to get the status of strengthening the protection through the constitution of the economy to protect the environment explicitly based on the constitution requires political and legal commitment to carry out constitutional amendments.

3. ENVIRONMENTAL PROTECTION EFFORTS UNDER THE STATE CONSTITUTION

The latest facts related to the issue of the status of environmental emergencies in Indonesia, based on the Environmental Performance Index (EPI), that the results of measurement of environmental management performance in Indonesia are ranked 133 by getting an index score of 46.92, in contrast to Switzerland which ranks (EPI, 2018). Strengthened by the fact that the emergency status of the rainforest environment in primary forests for oil palm management, mining and logging from 2000-2015 shows more than 4.5 million hectares of deforestation (Wijaya et al., 2017). Furthermore, the two biggest contributors to forest loss in Indonesia are logging and corporations in the oil palm sector. That fact, according to Attfield (2010), is that there is a correlation between abundant natural resources and environmental degradation such as deforestation, because deforestation is a way for countries to earn economic income. The fact that the is increasingly emphasizing Indonesia is the country that contributes most to forest destruction besides Brazil, India, Mexico and Nigeria, as a “logging union” (Attfield, 2010).

The fact of deforestation, according to Vidal (2013) is the biggest deforestation in Indonesia in the regions of Sumatra and Kalimantan. Rainforest is damaged by loggers and the paper industry. As a result of the exploitation and exploration of the rainforest, for example to show the loss of the fastest forest cover in the humid tropics. Furthermore, according to Vidal (2013), this has implications for carbon loss, biodiversity conservation, and livelihoods of local residents Table 3.

Based on these statistics, according to BNPB there were 2175 disaster events in Indonesia, with details of floods (737), tornadoes (651), landslides (577), forest and land fires (96), floods and landslides (67), drought (19), earthquakes (18), abrasion (8), and volcanic eruptions (2). To strengthen the argumentation of the high number of disasters in Indonesia, based on data from the United Nations Office for Disaster Risk Reduction, stated that the five countries were hit by the highest number of disasters were the United States, China, India, the Philippines and Indonesia, (<https://www.unisdr.org/we/advocate/climate-change>, 2015) shows that at present Indonesia is in an emergency condition of clean water.

Statistics on pollution and river conditions show that 73.24% of rivers are heavily polluted, and only 26.76% which is worth consumption. The data illustrates the condition of large rivers where many Indonesians who live in the area and depend on the river for their conditions are heavily polluted. The river

Figure 1: Energy consumption per sector in 2016

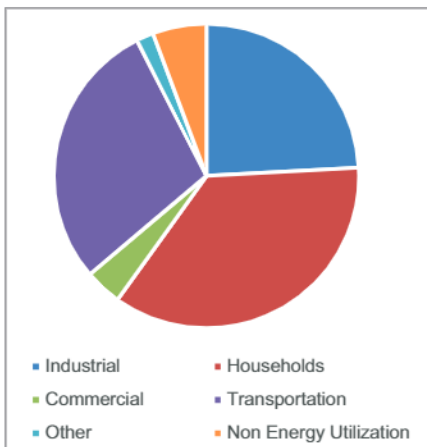


Figure 2: Ecological disaster emergency status data in Indonesia



Source: Wahana Lingkungan Hidup Indonesia (WALHI) dan BNPB, 2018

is a source of clean water for bathing, washing, agriculture, livestock and also industry, for example pollution of the Citarum and Ciujung rivers (Wahana Lingkungan Hidup/WALHI, 2018) Figure 2. Whereas, the preservation of the environment and natural resources is a major challenge for the economic growth agenda inclusive and sustainable in Indonesia that needs more water for drinking, cleaning and food production. The problem of endemic pollution that has implications and has a low impact on water quality and the massive “movement” of pollution in Indonesia is a problem that is also experienced in various other developing countries that are symmetrical with the pace of industrialization and urbanization, for example, India (Helmer and Hespagnol, 1997). Apart from environmental emergencies from aspects of ecological disasters, deforestation and river pollution. Another aspect of environmental emergency is the lack of State consent to environmental management and protection which is its obligatory constitutionality to measure the State’s commitment in the management and protection of Indonesia’s environmental sustainability.

The status of the EPI for Indonesia is measured based on 10 indicators, as follows: (1) Environmental health; (2) water effects on human health; (3) water pollution (effects on human health); (4) air pollution (ecosystem effects); (5) water resources (ecosystem effects); (6) biodiversity and habitat; (7) forests; (8) fisheries; (9) agriculture; (10) climate change. Based on the data, it shows that the low commitment of the State in relation to the environmental issue as evidenced by the EPI rankings stagnated and the decline in Indonesia’s ranking in 2018 was ranked 133 out of 180 countries in the world. The health environment rating for Indonesia is ranked 135 out of 180 countries. That, shows that the environment is very necessary to get serious political and legal attention for strengthening environmental protection through the constitutionalisation of the idea of the ecocracy. Reality shows that it is increasingly strengthening the argumentation for the agenda of strengthening the status of environmental protection based on a constitution that does not only look at the environment or the universe as an object to fulfill human greed and fulfillment of mere economic growth.

4. CONCLUSION

This study confirms that although the Indonesian Constitution has adopted environmental rights and sustainable concept based on Article 28 H and Article 34, constitutional provisions concerning environmental protection, are not specifically regulated and

expressive verbis. In fact, the position of the environment has not been seated as a legal subject that must be strictly protected under the constitution. Likewise with the provisions of the constitutional procedure for environmental protection and environmental rights in the Court, there are no provisions for constitutional procedures, such as constitutional complaint or suite action, and constitutional questions, to carry out environmental protection and the protection of environmental rights in constitutional courts or the supreme court.

In addition, the absence of constitutional obligations for every legal subject (central government and local government and corporations and citizens) to protect other legal subjects in case the environment whose existence is a place to depend on the existence of human life and other ecosystems on now generation and the future generation will be detrimental for the ecological, economic, and socio-cultural interests. In the future, Indonesia is very urge to carry out a constitutional movement of the idea of ecocracy, to strengthen the provisions of Article 28 H and Article 34 which are helpless when faced with economic greed by corporations as other environmental destroyers. Thus, the commitment of the State and citizens is needed to carry out constitutional reform agenda as the supreme of the law to realize the ecocracy constitution as the new paradigm of environmental sovereignty, because it is realized that the current constitutional norms (Article 28 H and Article 34) still need to be reaffirmed to strengthen the provisions of environmental protection to the level of the constitution, as evidence of a committed State and the obligation to protect the environment, from massive environmental damage. Likewise, if compared to the constitution of other countries, Indonesia’s current constitution is very far behind the idea of eco-constitutionalism or ecocracy as the constitution of Ecuador, Bolivia, Switzerland, Egypt, France which explicitly supports the environment (both water, mountains, sea, rivers, forests, animals, etc.) as subjects of law and the State, corporation, and citizens are obliged to protect them.

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