Chapter VIII Development of Environmental Law Legal Reform in Indonesia

Chapter VIII

DEVELOPMENT OF ENVIRONMENTAL LAW AND LEGAL REFORM IN INDONESIA

Naoyuki Sakumoto

I. INTRODUCTION

Indonesia has been undergoing a process of legal reform (*Reformasi Hukum*) since 1998, the scale of which is the largest in its history in the wake of democratization and decentralization movements that started with the fall of the former President Soeharto. Under President Suharto's authoritarian rule that lasted for some 32 years, legal study was constrained and ideologized as "Pancasila Jurisprudence." The first stage of this legal reform process continued until 2004. Environmental law was not an exception like other targeted areas of law. The Environmental Management Act No.23 of 1997 (EMA 1997) that replaced the Act No. 4 of 1982, [1] presently stands as the basic environmental law and functions as "an umbrella Act."

Two general factors have accelerated the development of environmental law in Indonesia. One is international impacts and the other is the growing domestic concern[2] against emergent environmental problems. Indonesia became aware of the need to formulate a national environmental policy through its participation in the UN Conference on Human Environment in Stockholm in 1972.[3] The Indonesian Government did not realize the need for environmental management in the early period of 1970's, especially before the Stockholm Conference. Environmental concern over the increase of environmental degradation and destruction has accelerated the need for arranging environmental law in Indonesia.

The legal reform brought about a strong impact to decentralize environmental management in Indonesia. Through legal reform, governmental powers were decentralized both through the "vertical" and "horizontal" levels. Vertically, means the political powers were decentralized from Central Government to Regional Governments, where Province, District, and Municipality was placed as equals as independent autonomous regional units. Whereas, horizontally, political

powers in the Central Government was decentralized based on the separation of powers principle. As a result, Governmental authority over environmental management was required to be decentralized to each regional Government by virtue of a Constitutional mandate and other related Acts on decentralization.[4] However, the EMA 1997 itself has not been revised since the beginning of the reform period but has some contradictions with the revised Constitution of 1945. This is a strange phenomenon because under the un-amended EMA 1997 of the "*orde baru*," a number of implementing laws have been enacted and been implemented in the last decade.

The EMA 1997 is listed for amendment in the PROLEGNAS 2005-2009.[5] As the draft Act is not publicized, actual contents of the draft cannot but inferred from the recent discussions that have appeared in the various forms of media and some conference documents. In the PROPENAS 2000-2004 (Act No. 25 of 2000), an additional memo was attached saying that it has to be coordinated with the Decentralization Act No. 22 of 1999. On one hand, decentralization of environmental management seems to coincide with the goals of democratization and decentralization, whereas, on the other hand, environmental management is generally required to be integrated and simultaneously provide some form of empowered against worsening environmental conditions.

Legal reform in the area of environmental law has not yet been finished or, rather, it is worth noting that new challenges have arisen such as the need to adjust to the post legal reform era. The excessive and rapid decentralization process has accelerated the destruction of the environment in Indonesia.[6] Decentralization is necessary, but extreme decentralization is not the only means of achieving sound environmental management that is in harmony with the sustainable development envisaged. The question that the author wishes to pose is where integrated environmental management and the decentralization policy can harmonize together especially at the developing stage.

Based on this basic understanding, this article intends; to study two developmental factors of environmental law in Indonesia (Part II); problems of environmental law before and after legal reform (Part III); and to assess future tasks in terms of legal reform (Part IV). The author's interest in this article is the role of environmental law especially at the developing stage and how this must sometimes be coordinated according to local conditions of developing countries and differentiated from those taken for granted in developed countries.

II. TWO DEVELOPMENTAL FACTORS of ENVIRONMENTAL LAW in INDONESIA

A. International Impacts and the Domestification of International Environmental Law Principles

The Stockholm Conference had an impact on the enactment of the 1982 EMA and the UNCED I on the enactment of the EMA 1997. With these international impacts, Indonesia has taken immediate actions in terms of formulating national policy, building institutions, and the arrangement of environmental laws. This situation of exposure to international changes is more or less the same with any other country because the environmental law is still a young area of law with only three decades of history but challenged with heavy tasks to solve.

1. Impacts of the UN Stockholm Conference on the EMA 1982

The Declaration of Human Environment as one of the major products of the Conference crystallized fundamental principles of environmental law and encouraged every country to establish a sustainable and functional environmental law. This is the first international impact of note on the development of Indonesian environmental law. In Indonesia, the environment is defined as the "human environment" because attention has been paid not only to the physical environment but also to the social and human environmental aspects. In Indonesia, the word "*Lingkungan Hidup*" (literally "living environment") is applied.[7] Professor Munadjat once explained the four types of environmental problems in Indonesia as the "4P's" (Pollution, Poverty, Population, and Politics).

The Broad Guidelines of State Policy of 1969 (*GBHN; Garis-Garis Besar Haluan Negara*) and the following Five-year National Development Plan (REPELITA I, 1969/70-73/74) did not take up the theme of environmental management at the national policy level. In 1972, the "Seminar on Environmental Management and National Development" was held at the Padjadjaran University over May 15-18 in preparation for the Stockholm Conference, and the discussion on the "Legal Arrangement on the Human Environment" was spelled out as the Country Report of Indonesia, which was submitted to the Stockholm Conference.[8]

Later, the Inter-Ministerial Committee on the Formulation and Planning on the Government's Environmental Policy[9] was established by Presidential Decree No. 16 of 1972 (PD/Keppres No. 16 of 1972), which was led by Prof. Emil Salim (Men-Pan/Wakil Ketua BAPPENAS), formulated the first environmental policy for

Chapter II of the GBHN 1973-1978 and Chapter 4 of REPELITA II. Indonesian government issued PD No. 27 of 1975 to establish the Committee for an Inventory Survey and Evaluation of Natural Resources.[10] Finally, in 1976, a working group on laws and institutions was set up for arranging environmental laws.

Further, Indonesia has ratified many international conventions and accepted international environmental law principles. One of the most influential ones in the early period was the Stockholm Declaration. Some of the well-known legal principles among the twenty-one principles are as follows.

1. Environment is a basic human right. Protecting and improving the environment is a responsibility for all. (Principle 1)
2. Natural resources and natural ecosystems must be safeguarded. (Principle 2)
3. Serious or irreversible damage that exceeds the capacity of the environment must be halted. (Principles 6 and Principle 7)
4. Taking steps to prevent pollution is a responsibility of Sates. (Principle 7)
5. International technical and financial assistance are necessary to developing countries. (Principles 9 and 12)
6. Not to cause damage to the environment of other States or of areas beyond the limits of national jurisdiction is a responsibility of States. (Principle 21)
7. Co-operation of developing international law regarding liability and compensation is a responsibility of States. (Principle 22)
8. Multilateral or bilateral cooperation to effectively control, prevent, reduce, and eliminate adverse environmental effects is necessary. (Principle 24))
9. To play coordinated, efficient, and dynamic functions for the protection and improvement of the environment is a role of international organizations. (Principle 25)

Among these principles, Principles 9, 12, 22, and 25 apply exclusively to developed countries, whereas the other principles are applicable to every country. It can be said that most of the international principles are accepted and reflected in the EMA 1982, however, a number of them are not expressed in an explicit manner. Environmental rights (Principle 1) in Article 5, safeguard of natural resources and eco-systems (Principle 2) in Article 12, environmental protection and pollution prevention (Principle 6 and 7) in Article 1 and 4(1), and State responsibility on

extra-territorial pollution (Principle 21) in Article 4(f), respectively.

Following is a list of international conventions on the environment ratified by Indonesia (Table 1).

Table 1 Major International Conventions on the Environment Ratified by Indonesia

International Convention	Ratification by Domestic Law
Vienna Conference for the Protection of the Ozone Layer Montreal Protocol on Substances that Deplete the Ozone Layer as Adjusted and Amended by the Second Meeting of the Parties	PD No. 23 of 1992
International Convention on Civil Liability for Oil Pollution Damage	PD No. 18 of 1978
International Convention on Establishment of an International Fund for Oil Pollution Damage	PD No. 18 of 1978
Convention of International Trade in Endangered Species of Wild Flora and Fauna (CITES)	PD No. 43 of 1978
United Nations Convention on the Law of the Sea	Act No. 17 of 1985
Ratification of the International Convention for Prevention of Pollution from Ships (MARPOL)	PD No. 46 of 1986
Convention Concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention)	PD No. 26 of 1989
Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal	PD No. 61 of 1993, PP. No. 60 of 2005
Convention on Wetlands of International Importance Especially as Waterfowl Habitat (RAMSAR Convention) United Nations Convention on Biological Diversity	PD No. 48 of 1991
Kyoto Protocol	Act No. 17 of 2004
United Nations Framework Convention on Climate Change	Act No. 6 of 1994

(Source) Author.[11]

(Note) "PD" is Presidential Decree.

Table 2 Developmental Stages of Indonesian Environmental Law and Policy Changes

	I. First Stage: Preparatory Development (1945～1981)	II. Second Stage: Initial Development (1982 ～1996)	III. Third Stage: Consolidation of Basis (1997 ～present)
International Movements	1.UN Conference on Human Environment (1972)	1.UNCED I (1992)	1. UNCED II (2002)
National Movements/Policy Administration Levels	1.GBHN 2.REPELITA I (1969/70~1974/75) 2.REPELITA II (1975/76~1980/81) 3. PJP 4.State Ministry(non portfolio) of Supervising Development & Environment (PPLH, 1978)	1.GBHN 2.REPELITA III (1981/82~1986/87) 3. REPELITA IV (1986 /87~1991 /92) 4. REPELITA V (1992/93-1997/98) 5.Min. of Population and Environment (KLH.1983) 6. BAPEDAL(1990) 7.Min. of Environment (1993)	1.BAPEDAL merged into Min. of Environment (2000). 2.GBHN 3. PROPENAS(2000 ~2004) 4. PJP II
Major Laws	1.Constitution 1945 2. Act No. 5, 1967 on Forestry, Act No. 5 1965 on Agriculture 3.Laws of Netherland Indies (BW/Civil Code)	1. Constitution 1945 2.EMA 1982 3.Laws of Netherland Indies (BW/Civil Code)	1.Constitution1945, revised 2.EMA 1997 3.Laws of Netherland Indies (BW/Civil Code)
Policy Goals	1.Development & rational use of	1.Development and environmental	1.Manage and maintain natural resources for

	natural resources (GBHN) 2.Eco-system and development, Development without destruction (Chap.4, REPELITA II)	quality (Chap.7, REPELITA III) 2."Harmonization between population and the development" policy (REPELITA IV) 3."Balancing three factors" (population, environment, development) to achieve sustainable development (REPELITA V)	improving the welfare of society 2.Improve potentiality of natural resources and environment 3.Apply indicators that will regenerate conservation capacity of natural resource management 4. Delegate environmental management authority of the central Government to regional Governments selectively 5. Utilize natural resource optimally for the welfare of society considering conservation function and environmental balance (GBHN, PROPENAS)

(Source) Author.

2. Impacts of UNCED I on the EMA 1997

The next impact on Indonesian environmental law is the First United Nations Conference on the Environment and Development (UNCED I) held in Rio de Janeiro in 1992. Soon after the UNCED I, Indonesia felt the need to establish a Ministry solely responsible for environmental management. In 1993, the Ministry of Population and Environment (KLH) was reorganized into the Ministry of Environment (*LH/Kementerian Lingkungan Hidup*). Indonesian commitments in the UNCED I are reflected in the GBHN 1993 and the succeeding REPELITA VI. The Indonesian Government introduced the concept of "Sustainable Development" from the Rio Declaration and this was reaffirmed in the EMA 1997 as the key concept of environmental management. Indonesia also launched "Agenda 21 Indonesia" as a means of harmonizing Indonesia's national environmental policy to that of the international community.

B. Developmental Stages of Environmental Law in Indonesia

The development of environmental law in Indonesia can roughly be divided into three stages.[12] The first begins from 1945 or even before Indonesia's independence until the enactment of the EMA 1982, where there was no apparent development in the environmental law. This first stage (1945-1981) can further be divided into two parts; one is the period when no symptom of enacting environmental law was seen and another is the preparation period for enacting the first EMA as a consequence of the international impacts as noted previously.

The second stage (1982~1996) roughly overlaps with the periods of REPELITA III to V. In this period, people's concern regarding the environment gradually increased. The second stage is the initial period before consolidating the basis of environmental management. During this period, the first-born EMA was applied and the shortcomings of this Act in its application process became gradually obvious.

The third stage (1997~present) starts with the revised EMA 1997 under Suharto's Presidency. The table below sets out these developmental stages of environmental law (Table 2).

1. First Stage: Preparatory Development (1945~1981)

(a) Preliminary period (1945-1972)

This period can be accounted for as a previous stage before the preparation, when there was no development in the environmental law area. Any applicable law cannot be found to protect the environment or to prevent pollution. In the early post independence days, some mining and natural resource laws included provisions related to the environment such as damage or pollution; however, their objectives are limited in terms of protecting the environment. Industrial development or exploitation of natural resources was a greater priority. For example, Article 2(1) of the Act on Agriculture No. 5 of 1960 states that "the State shall have the authority to control land, water and space including natural resources under Constitutional Article 33(3)." However, this Article is too ambiguous in its expression to protect the environment. Article 30 of the Mining Act No. 11 of 1967 provides that "the holder of a mining authority shall be responsible for returning the land to the State before it causes any danger of diseases to the people of the community." This article provides for certain "prohibition" of activities in certain cases, however, no sanctions are stipulated for these crimes.

General provisions are found in the Civil Code (BW); Article No. 1365 on Unlawful Acts and Article No. 1313 on Breach of Contract. Under the unlawful acts

provision, a damaged party, usually a weaker damaged party, is required to satisfy the burden of proof by evidencing the proof of intention. This burden is too difficult for the damaged party unless the Principle of Strict Liability is applied. In contrast, the breach of contract provision requires a contract between the parties concerned, as a pre-condition to seek compensation. This is clearly beyond the capacity and forseeability of the damaged party.[13] Further, Article 295 of the Criminal Act (HIR) and Article 184 of Criminal Procedural Act provide the regulatory framework for the law of evidence. However, expressions in these provisions are too general and ambiguous to give any detailed definition on the environment or to be applied as the legal basis for protecting the environment.

(b) Preparation period for the EMA 1982 (1973~1981)

The latter period was the preparatory period for the enactment of the EMA 1982. Chapter II of the GBHN states that environmental management is an urgent task both at central and local levels, and this reiterated in Chapter 4 of the succeeding REPELITA II. This is the first time the Indonesian government officially declared its environmental policy. REPELITA II recommends the need for taking up several areas of environmental management.[14] As for the environmental law, REPELITA II stated the need for developing environmental standards to regulate degrading environmental quality in city areas,[15] and stressed the need for developing sectoral and administrative laws such as water, land-use, forestry, nature reserves, nature conservation, and so on.[16] However, REPELITA II seems to have ended in a general statement.

Discussions for enacting the EMA became more active during the period of REPELITA III, where the immediate need to develop a basic law on environmental criteria and standards was proposed. The suggestion was that the proposed Act should be comprehensive, legally systematic, and sectorally complemented by implementing laws. REPELITA III mandated the drafting work be started immediately in cooperation with the available legal institutions in Indonesia. However, REPELITA III was based on a development-oriented policy and as such a "development without environmental destruction."[17] Economic development was the priority under Suharto's development administration.

2. Second Stage: Initial Development (1982~1996)

The EMA came into force on 11 March 1982 and lasted for fifteen years until it was amended on 17 September 1997. Several reasons for enacting the EMA

1982 are stated in the Elucidation as follows;[18]

i) Utilization of natural resources to optimally satisfy the welfare of people based on "*Pancasila* principles"[19] and Constitutional Articles 5(1), 20(1) and 33,

ii) To change people's awareness of the environment,

iii) The formulation of a national policy on the environment,

iv) The enactment of an integrated Act that can embrace existing fragmented laws and regulations into one legal system.

The expectation was that the EMA 1982 would integrate diversified laws and to provide a legal basis for environmental management.

During this period, the KLH was set up in 1983, and the Environmental Impact Management Agency (*BAPEDAL)* in 1990[20] directly under the Office of the President to strengthen the enforcement of the law. New environmental programs such as the Clean River Program[21], the Blue Sky Program[22] and the Conservation of Biodiversity were implemented as BAPEDAL initiatives. In order to strengthen environmental control, the KLH collaborated with the National Police and the Office of the Attorney General.

3. Third Stage: Consolidation of Basis (1997~update)

This is the period after the EMA was amended in 1997 and this also overlaps the legal reforms that started in 1998. The new environmental policy was declared by the People's Consultative Assembly/MPR IV/1999 and PROPENAS 2000-2004 under the Habibie Presidency. Environmental awareness has greatly increased especially after UNCED I. The need for strengthening environmental law and administration was taken for granted up to this point.

Following are three major policy documents on the development of environmental law.

(a) Chapter 4 of GBHN IV/ MPR/ 1999

Chapter 4 of the GBHN IV/MPR/ 1999 declares the following five policy directions, which were then succeeded by the National Development Plan (PROPENAS).[23]

i) Protection of the environment to improve people's welfare from generation to generation,

ii) Improvement, conservation, rehabilitation of the potentiality of natural

resources and environment, and economizing utilization,

iii) Application of indicators that can project environmental change and destruction,

iv) Delegation of Central Government powers to Regional Governments,

v) Utilization of natural resources optimally for the community paying attention to balancing sustainable development, economy, local social culture and spatial use as regulated by law.

(b) Chapter 10 of PROPENAS 2000-2004[24]

Based on the 5 policy directions of the GBHN, the PROPENAS proposes five development programs, one of which states the environmental law related to the organizational systematization and enforcement of law. This is clarified as follows. [25]

i) compilation of laws and regulations on natural resource management,

ii) provision of policy on the opportunities to allow social access and control to the management of natural resources and environment,

iii) evaluation of implementing laws related to the management of natural resources and environment,

iv) strengthening the institutions and apparatus of law enforcement for the management of natural resources and environment,

v) development of a supervising and controlling system of natural resources, especially marine resources, through the MNC method (monitoring, controlling, surveillance),

vi) acknowledging community and local organizations taking into consideration ownership and management of natural resources,

vii) strengthening local Governments' capacity in the management of natural resources and the environment including those in the administratively crossing areas.

Besides these basic activities recommended, four more activities are added, that is, development of ratification of international agreements, improvement of controlling systems against bio-piracy and local technology from abroad, development of incentive and disincentive systems in the management of environment and natural resources, and development of voluntary environmental management program such as ISO14000.

PROPENAS also discusses the Legal Development Program in Chapter 3. It formulates policies for legal reform and states that as one of the basic activities of the development program it plans to enact laws to increase capacities relating to ecosystems, environment and the local community. According to the attached Table D in the Legal Development Policy Program[26], enactment of environment and natural resources are grouped in No. A5 among 43 sectoral legal reform programs called PRH *(Program Reformasi Hukum)*. Ten kinds of laws[27] are categorized in this group and are scheduled to be enacted or perfected during the PROPENAS period[28]. The EMA 1997 is included in this list to be coordinated with the Local Autonomy Act No. 22 of 1999.[29]

(c) Long term Plan 2005-2025 (PJP II)[30]

Section 9 of Chapter 2 on "Vision and Development Direction in the Long Term Plan 2005-2025" (*PJP, Visi dan Arah Pembangunan Jangka Panjang Tahun 2005-2025*) explains the vision and long term policy direction on the environment and natural resources development. The visions are directed towards the capacity development of the people in utilizing natural resources and protecting the environmental function in a sustainable, fair, and balanced manner for the optimal use in favor for the welfare of people. It also states that the long term policy direction for upgrading the quality of management of natural resources and sustainable environment with a support of fair and explicit law enforcement.[31]

III. PROBLEMS of ENVIRONMENTAL LAW BEFORE and AFTER LEGAL REFORM

A. Comparison of the EMA 1982 and the EMA 1997

The text of the EMA 1982 is very short and simple, and composed of basic Articles. Some of the outstanding provisions are; the right to enjoy a good and healthy environment, Polluter Pays Principle, EIA, Incentives, Licensing, Pollution Prevention and Reduction, rights and duties to participate in environmental management, development of environmental awareness, compensation to the people who have suffered damage and recovery. These basic Articles were brought to the EMA 1997. Following are the key features of the EMA 1997 in comparison with the EMA 1982 (Table 3).

i) Strongly affected by international impacts and introduced a number of international environmental law principles

ii) Integrative approach adopted as national environmental Policy and environmental management, which is repeated and emphasized

iii) Decentralization is adopted in two forms; Deconcentration (delegation of authority to local Central Government offices) and decentralization (transfer of select authority and matters of Central Government to Local Governments).

iv) Environmental rights and duties are re-affirmed and additional rights to information were added.

v) Environmental management instruments, such as emission standards, EIA, waste management, and licensing were renewed and strengthened. However, the types of measures are limited. Economic measures are not introduced.

vi) Provisions relating to enforcement and compliance are numerous. The investigator system was introduced and sanctions were increased in severity and could either be criminal or administrative.

vii) New systems like environmental auditing, ADR, and class actions were introduced.

B. Problems of environmental law before the legal reform

1. Elucidation Number A7 of EMA 1997.

At first, the need for the amendment of the EMA 1982 should be analyzed. Four reasons are given as an explanation for the amendments to the EMA 1982 in the official Elucidation Number A7 of the EMA 1997.[32] However, this Elucidation seems to explain the need for amendment in a very ambiguous manner and the underlying problems are not explained.

i) To cope with the increase of environmental awareness and to reflect international changes in the amended Act.

ii) To consolidate a foundation for evaluating and adapting all laws and regulations so that it can contain stipulations on the environment.

iii) To give effect to ADR, as the number of environmental disputes continues to increase, and to open an opportunity to adopt class action as an environmental dispute resolution mechanism.

iv) To expand compliance attitudes in the community and to strengthen the application of criminal sanctions, because civil law and

administrative law as well as ADR do not function effectively against pollution conducted by corporations.

Table 3 Comparison of the Environmental Management Act (EMA) of 1982 and the Amended Act of 1997

	EMA No.4 of 1982 (9 Chapters, 24 Arts.)	**Amended EMA No. 23 of 1997 (11 Chapters, 52 Arts.)**	**Evaluation of Amended EMA**
National Environmental Policy in EMA	/National management authority, framework & formulation of environmental policy based on the Constitution of 1945 & Pancasila (Preamble, Art. 10) /Integrate all the environment related laws and regulations into a systematized legal basis for managing environment (Preamble) /Establish Ministry Responsible for environmental management (Art. 1)	/Environmental management is an integrated effort (Art. 1(2)) /State's Responsibility Principle over natural resources (Art. 3(1),Art. 8(1)) /Sustainability Principle (Art. 3(2)) /Principle of Exploitation (Art. 3(3)) /State's Responsibility to Determine National Policy on Environment in an integrated manner (Art. (9))	I I N I I
Environmental Administration	/Establish basis for environmental management (Preamble, Art. 10, Art. 18) /State's responsibility to formulate environmental policy (Art. (8)) /Policy implementation	/Determine national policy on environmental management in an integrated manner (Art. 8, Art. 11). /Integration of environmental management and policy at national level (Art. 11(1), Art. 12(1)). /Deconcentration (delegation of authority to local Central	I I N

	at central and local levels (Art. 18(1)),	Government offices)(Art. 12)) /Decentralization (transfer part of authority and matters of Central Government to local governments (Art.13)	 N
Environmental Rights and Duties	/Right to a good and healthy Environment (Art. 6) /Environmental Rights and Duties to Participate in Environmental Management (Art. 5, Art. 6) /Duty to protect the environment (Business)(Art. 7) /NGO (LSM) as supporters of Environmental management (Art. 19)	/Right to a good and healthy Environment (Art. 5(1)) /Right to Environmental Information (Art. 5(2)) /Right to play a role in Environmental Management (Art. 5(3), Art. 7) /Duty to preserve and protect the environment (Art. 6(1)) /Duty to provide true and accurate information (Business and/or activity) (Art. 6)	S N I N N
Compliance Measures	/Licensing (Art. 7) /Environmental Standards (Art. 15) /EIA (Art. 16)	/Environmental Standards (Art. 14) /EIA (Art. 15) /Waste Treatment (Business and/or activity) (Art. 16) /Hazardous&Toxic Waste Materials (Art. 17) /Licensing (Art. 18)	I I N N I
Enforcement Measures /Investigation		/National police and Civil investigator Offices for Criminal investigation (Art. 40).	N
Damages and Compensation	/Polluter's Pay Principle (Art. 20(1)) /Damages & Compensation of Recovery Cost (Art.	/Polluter's Pay Principle (Art. 34(1)) /Damages and Compensation of Recovery Cost (Art. 34) /Strict Liability (Art. 35)	I I I

	20(3)) /Strict liability (Art. 21)		
Environmental Dispute Settlement		/Through the Court based settlement (Art. 34) /Out of Court based settlement procedures (Art. 30~39) /Class action ((Art. 37～Art. 38)	I N N
Environmental Auditing		/Environmental Auditing (Art. 28).	N
Sanction	/Penal sanctions (Maximum 100 million Rupiah and/or 10 years of imprisonment)	/Administrative Sanctions by Governor & Head of the Level I Region (Art. 25~Art. 27) /Criminal Sanctions (Maximum raised to 750 million Rupiah and 15 years of imprisonment (Art. 41~Art. 48).	N I

(Source) Author.

(Notes) Categorized and indicated as the following notes: The same in both is 'S'; Newly introduced 'N'; Wording and contents intensified 'I'.

2. Other Underlying Problems in Amending the EMA 1982

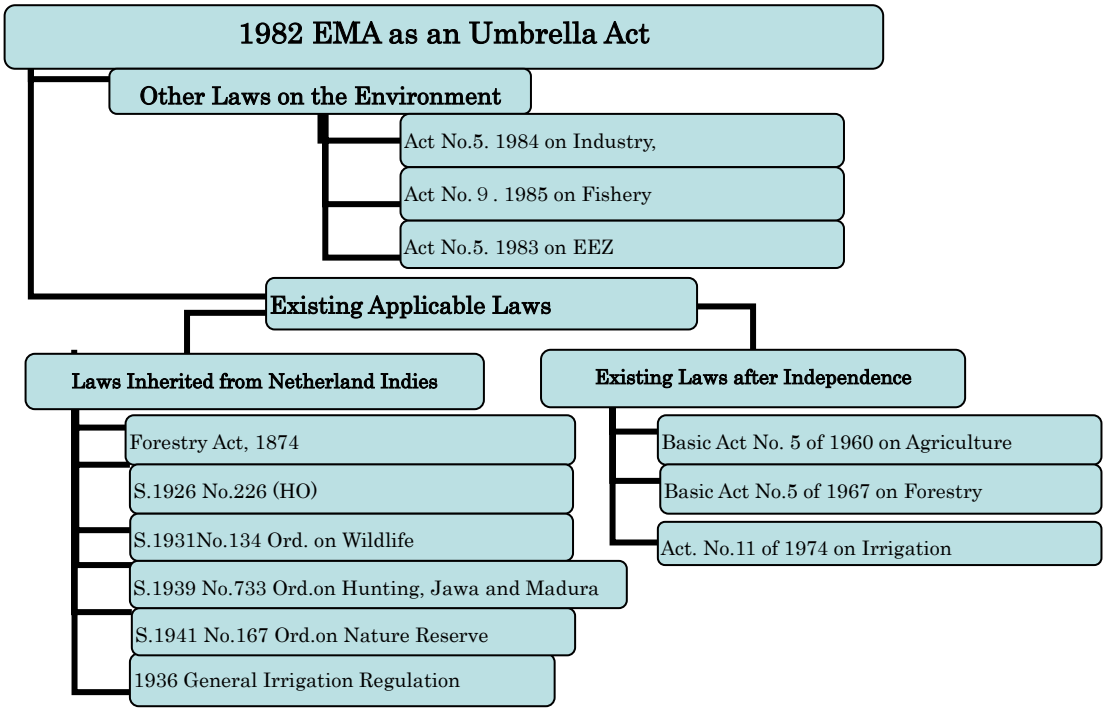
(a) Problems related to the general legal situation in Indonesia

The general situation of law in this period was chaotic and unsystematic. The legal system at this time was in its entirety a mixture of the colonial legacy with some laws being characterized as excessively development oriented and/or politically authoritarian. It is difficult to characterize the Indonesian legal system as integrated, modernized, or democratized at this time. Political will to develop a harmonious legal system was not a priority at the National Government level. Although there had always been a Chapter on legal development in every REPELITA since the REPELITA system was introduced,[33] the role of law was understood as an engineering instrument to support economic development.

Table 4 shows the underdeveloped general situation of Indonesia. In this table, it is clear that the legal system of Indonesia was/is still supported by many colonial laws and statutes of the Netherlands East Indies. What is surprising is that Indonesia still applies a translated version of the Civil Code (BW) of 1847 that was used by the Dutch colonial masters despite that Indonesia is a Civil Law country.

Generally speaking, the Civil Law is essential for establishing a civil society based on contracts and also as a legal basis for developing private laws. A similar situation can also be found in other areas of law. Environmental law, in its legal character, must depend much on the development of other areas of law. However, it has to be noted that the core part of legal infrastructure is still based on the colonial past of the Netherland East Indies. This is the major reason why the enactment of the basic law was delayed[34] and a lot of efforts had to be made to enact the 1982 EMA.

Table 4 Legal Environment of Indonesia and the 1982 EMA.



(Source) Based on the data "Penindakan Pelanggaran Hukum Lingkungan" (EMDI), 1991.[35]

(b) The problem of delay in enacting implementing laws to the EMA

Enactment of sixteen laws and regulations was mandated in the EMA 1982, however, as of 1993, only four of these implementation laws were made. The other twelve had not been enacted according to Table 5 on the proposed implementation of laws under the EMA 1982. It is clear that an umbrella Act alone cannot work without the implementing laws being put into place to support it. The background reasons for the delay are not so clear.

Table 5 Proposed implementing laws under the EMA 1982 (as of 1993)

Delegating Provision	Type of Law	Content of Stipulation	Provided Laws & Regulations for Implementation
Art.6	Law	Rights and duties of every person to participate in the environmental management	
Art.7(3)	Law	Responsibility to protect the environment of every person who conducts activities and who are licensed	
Art.8(2)	Law	Formulation of Government's policy & implementation	
Art.10	Law	Authorization and utilization of natural resource by Government	
Art.11	Law	Protection of non-biological natural resource	
Art.12	Act	Conservation of natural resource and ecosystem	Act No. 5 of 1990
Art.13	Act	Actions of natural resource protection	
Art.14	Act	Protection of cultural preserve	
Art.15	Law	Environmental quality standards	GR No. 20,1990, L No.03/91,
Art.16	Law	Environmental impact assessment (EIA)	GRNo. 29,1986(Amended by GR No. 51/1993), L42 (1994), L056 (1994)
Art.17	Law	Pollution control in a comprehensive and sector-wise manner	Ministerial Order No. 2 (SKEP.Men.KLH.02.1988)
Art.18(1)	Law	Setup of national environmental management administration	
Art.18(2)	Law	Formulation of national policy at local government levels	
Art.20(2)	Law	Damages	
Art.20(4)	Law	Payment of recovery cost	
Art.21	Law	Strict liability	

(Source) Penindakan Pelanggaran Hukum Lingkungan, 1991.
(Notes) "GR" is Government Regulation, "L" is KEPMENLH/Ministerial Order of Lingkungan Hidup).

(c) Technical Problems – Ambiguities and Weaknesses

One of the most obvious technical problems relates to the poor wording of the legislation that had a significant impact on interpretations relating to "evidence" and "responsibility."[36]Furthermore, it must be noted that the guidance provided in the Elucidation to the EMA 1982 was insufficient.[37] Problems regarding the implementation of the EMA 1982 became more and more obvious over time. There are criticisms that suggest that "the enactment of the EMA 1982 was seen as a milestone in Indonesian history, but its practical effects have been quite disappointing." [38]

B. Needs and Problems after Legal Reform

1. Contradictory problems based on Constitutional influence

During the legal reform, certain Constitutional provisions including the Preamble and Article 33(3) did not change, but most other provisions were radically changed or repealed. The Preamble states that "The State shall protect the entire Indonesian people and their entire homeland of Indonesia, and in order to advance their general welfare," and Article 33(3) provides that "Land and water, and the natural resources found therein, shall be controlled by the State and shall be exploited for the maximum benefit of the people." These emphasize the strong role of the State.

Five other Constitutional provisions were added relating to the environment.

i) "Every person shall have the right to communicate and to obtain information for the purpose of development of his/her self and social environment" (Article 28F)

ii) "Every person shall have the right to live in physical and spiritual prosperity, to have a home and to enjoy a good and healthy environment"(Article 28H);

iii) "The organization of the national economy shall be conducted on the basis of ・・・・・environmental perspective・・・・・" (Article 33(4));

iv) "utilization of natural resources and other resources between

the Central Government and Local Governments shall be regulated and executed fairly and equitably based on the law"(Article 18A)

v) The "Regional House of Representatives (DPRD / Dewan Perwakilan Rakyat Daerah) can propose bills on the management of natural resources to House of Representatives (DPR / Dewan Perwakilan Rakyat), can participate in the discussions, and can oversee the implementation of laws on environmental management in regions" (Article 22D).

It may be stated that the amended 1945 Constitution presents four broad directions on environmental management. First is the strong role of the State to protect the environment in an integrated manner, as declared in the Preamble and Article 33(3). It says that "environmental resources shall be controlled by the State and exploited for the greatest benefit of the people," The expression is ambiguous but it explicitly emphasizes the strong role of the State based on an Administrative State concept that is to protect the economy and to solve social problems. It is understandable that the drafting work done on the Indonesian Constitution was conducted during the period of military occupation by Japan and the influence by the strong administrative state model of the Meiji Constitution. This concept of a strong State role can be traced back to the Weimar Constitution of 1919. The social rights provisions in the Indonesian Constitution can be understood in this historical context.

The second direction is the decentralization of environmental management from Central Government to Regional Governments as provided in the law. Details of decentralization are contained in two Acts, namely; No. 22 and No. 25 of 1999,[39] later amended by Acts No. 32 and No. 33 of 2004, respectively. These Constitutional provisions allow Provinces, Districts, and Municipalities to become independent autonomous regions, which has accelerated the confusion and lawlessness that afflicts environmental conditions throughout Indonesia.

The third direction is an increase in the number of environmental rights-oriented provisions in the Constitution. This is the symbolical evidence of democratization and is typical of most emerging democracies. Article 28F ensures the right to environmental information. Article 28H ensures the environmental rights to enjoy "a proper and healthy environment." However, it is reasonable to assume that the amended Indonesian Constitution has emphasized only one side of

environmental rights and did not sufficiently state obligations.[40] The EMA 1997 provides environmental rights and duties from both sides. Here exists a clear understanding gap between the EMA 1997 and the Constitutional provisions.

The fourth direction is the adoption of international environmental law principles. Sustainable Development (*Pembangunan Berkelanjutan*) and the environmental inputs into the economy, these are efforts to achieve harmonization with international developments of environmental law.

These four Constitutional directions reflect the present bewildered condition that Indonesian environmental law and management finds itself in after legal reform. A situation such as this can be explained by shorter words as follows: first, is "integration or disintegration" in terms of environmental management, in essence this is a conceptual conflict between the desire to maintain a unitary state or devolve into a more federal system of independent States. The second and third relate to "democratization and decentralization". And fourth is internationalism. All these concepts are generally found in any international legal document because these directions have legal value. The problem is that the Indonesian Constitution does not reflect any priority with respect to which of these directions for implementing the most efficient and effective environmental management system is to come first.

2. Problems pointed out by the BAPPENAS Study Report

Following are the five environmental law legal problems pointed out in the BAPPENAS Study Report on long-term environmental policy.[41]

i) Legal provisions in Indonesia are often vaguely and broadly regulated based on plural objectives or general principles, which makes it difficult to resolve environmental problems under specific conditions. For example, Article 7(1) of the Fishery Act No. 9 of 1985 prohibits any behavior of any person to destruct fish habitats in the oceans. However, on the other hand, the Act adopts a licensing system for trawling fishing methods under certain conditions. The contradiction is that it is clear that trawling methods will endanger fish habitats.[42]

ii) Indonesia, like other countries, drafts general legislation adopting broad legal principles, which are then clarified through the confirmation of implementing regulations which give legal force to the general principles. Unfortunately, the pace of confirmation of

implementing regulations is slow and the codification process has traditionally over-simplified the text and thereby lends itself to greater ambiguity rather than clarity.

iii) As the number of environmental conflicts increases, the role of the executive to resolve these conflicts is expected. Executive power requires legal certainty by referring to the precedents of the judiciary. This raises a question relating to what extent the Executive power should rely on judicial processes in order to resolve environmental disputes, particularly in terms of following legal precedents decided by the judiciary of the past. Furthermore, conflicts arise from the legal system itself. There exists different types of sanctions based on different standards and they are not uniform.

iv) Different definitions in different laws is a major issue. For example, "protected area" (*kawasan lindung*) is differently defined in the Fishery Act No. 9 of 1985, Conservation of Biodiversity and Eco-system Act No. 5 of 1990, Forestry Act No. 41 of 1999, and the Spatial Act No. 24 of 1992. Definition of "fish" (*ikan*) is also different. In the Fishery Act No. 9 of 1985, it is widely defined as "harvested" and includes marine turtles, marine mammals, shellfish, and so on, and, Biodiversity and Ecosystem Act No. 5 of 1990 protects endangered fish and wild life.

v) Decentralization has accelerated the arrangement of local environmental laws however the difference in definitions used as noted above means that there is a very real possibility that the definitions at the National and Local government levels may be different.

In the following table, Table 6, shows the current situation with respect to enactment and confirmation of local regulations on the environment as a result of the decentralization process and legal reform. In total, 198 local regulations out of some 2,693 can be obtained from the "*PERDA*" database on environmental management. A comprehensive data collection on local regulations is very difficult to find in Indonesia. However, the table below highlights what is available. The number of local regulations on the environment are increasing after the legal reform period, particularly in areas such as the exploitation of natural resources

like forestry, mining and energy, and fishery. However, the total number of enactments is too small if compared with the number of autonomous regions throughout Indonesia. Furthermore, especially the enactment of regulations on EIA, which is one of the essential environmental management tools, is too few even if compared with the total number of local regulations.

3. Other problems

(a) Inappropriate timing of enacting laws

The delay of enacting implementing laws for the EMA 1982 has already been discussed. However, similar, but different problems are also taking place (Table 7) / (Table 8).

i) There are 17 implementation laws that are mandated under the EMA 1997 to be enacted. However, 5 are still waiting for enactment, if referred to the latest Compilation of Laws and Statutes of Environment Law.[43] This is a similar pattern to the delay in the enactment of the EMA 1982.

ii) The EMA 1997 is listed for amendment in both the PROPENAS and PROLEGNAS as discussed previously. But there are a considerable number of implementing laws that have been enacted under the EMA 1997.

(b) Codification issue

Peeters[44] points out that such stipulations in the EMA 1997 as a "codification of environmental principles, procedures for decision making, access to information, provisions for integrated standard setting like a permit scheme, and sectoral provisions (the vertical layers) are not or are not precisely enough codified into this Act." He criticizes the ambiguous way that the stipulations are stated and the insufficient wordings used for these stipulations. Some examples are:[45] the right to environmental information (Article 5(2)), the stipulating method of "an integrated effort (Article 1(2)), the licensing (Article 19), the definition of "wastes" (Article 1(16)), the method of standard setting as a threshold limit or an effect-oriented approach (Article 1(13)).

(c) Excessive dependence on environmental criminal law[46]

There are many Articles in the EMA 1997 on the environmental criminal law (Articles 41 to 46); however, they are ill-structured to effectively apply criminal sanctions. It is pointed out in the paper[47] that some provisions depend too much on

administrative law. The problem of a "lack of thresholds for punishing negligent behavior" is also pointed out as a serious issue that must be addressed. This conceivably would permit the punishments for intentional criminal behavior to be lower than those punishments available for negligence. In order to apply environmental criminal law, different legal premises from other areas of law should be kept in mind. Examples are; in criminal law, "intent" is necessary for committing a crime, and the intervening stage by law will be delayed (concrete endangerment is needed), and the proof of environmental pollution is required.

IV. ASSESSMENT and CONCLUSION

Through the study of the development of environmental law and the problems related to the EMA 1997, some assessments follow.

1. Basic approach and legal reform

The EMA 1997 is based on the integrated approach as a whole, however, it also adopts decentralization (Article12) by categorizing it into two models, decentralization and deconcentration. It would seem that deconcentration has fallen by the wayside and disappeared as a result of legal reform. However, the integrated approach especially at the national level has proven to have been indispensable in strengthening the capacity to formulate national policy and environmental management programs. The integrated approach is an internationally accepted and commonly applied principle, which also coincides with the concept of "State's Responsibility." It requires strong leadership from the Government to resolve problems. In a developing country like Indonesia, where resources are insufficient, the integrated approach will make it possible to maximize the use of limited resources in an efficient, effective, and manner that is of greatest benefit. In the EMA 1997, adoption of the integrated approach is emphasized repeatedly.

Indonesia is at the starting point of an extreme decentralization process as a result of legal reform. Disputable Constitutional provisions and the mandated amendment of the EMA 1997 are also factors in this process. However, an "integrated but decentralized approach"[48] must be developed. The integrated approach does not mean the integration of everything by the Central Government, but integration at the policy formulation level and the environmental management level. Legal reform in the area of environmental law has not been finished yet but is

rather in the middle of the process.[49] Environmental law in Indonesia has the primary function of shaping the most suitable approach on environmental management.

2. Democratized and appropriate management measures

The EMA 1997 has introduced various international law principles and sophisticated tools like human rights, participation methods, class actions, environmental audits, EIA, and so on. However, it can be seen from Table 3, that a major part of the articles contained in the EMA 1997 are devoted to matters such as supervision (22~24), sanctions (Articles 25~27, 41~48), dispute settlement (34~39), and investigators (40), all of which support the command and control method in environmental management.

Two matters must be considered with respect to legal reform. First, environmental management measures and procedures need to be democratized. Second, appropriate measures must be utilized relevant to the type of environmental problems being encountered. The first means that management measures must be democratic and not authoritarian. Command and control methods must be used effectively but also in a transparent and accountable manner.

Furthermore, in order to confront the varied and increasing kinds of environmental problems facing Indonesia will require the application of appropriate measures. As noted previously, most measures in Indonesia are based on the command and rule method, which is most effective in top-down pollution control. However, this type of method will be limited to areas where urban environmental problems are rife and arise as a result of the environmental problems associated with the conduct of daily life like driving a car, using a toilet, and the disposal of general wastes. Appropriate measures include economic, educative, participatory, and emancipating measures. The EMA 1997 depends much on the measures based on command and control method. Recent discussions on the environmental law and reform seminars are[50] also seemingly concentrated on these topics.

3. Strengthening the Enforcement of Law

Some environmentalists insist on the introduction of an environmental court and others propose to strengthen environmental criminal law. Some criticize the wording and loopholes of the EMA 1997. However, these are far from the needed solutions for the environmental problems afflicting Indonesia. Whether or not to introduce an environmental court is not so important. Problems with the wordings

are also not that important. What can be achieved through the application of dispute settlement and sanctions alone is very limited in terms of preventing environmental problems. Dispute settlement and sanctions are all for the settlement issues of the future. Criminal sanctions may place pressure on people's conscience not to commit pollution crimes however the problem lies with the issue of prevention. Most important in terms of environmental management is the "prevention" of environmental problems rather than settling them after they have occurred. Enforcement discussions must be undertaken in conjunction with discussions on the strengthening of the environmental administration practices being applied, particularly in the regions.

Table 6 Number of Local Regulations on the Environment Enacted since Legal Reform

Local Regulations (*Peraturan Daerah*)	1999	2000	2001	2002	2003	2004	2005
1.General, Environmental Management & EIA			2	1	3	3	
2.Institutional Setup Administration	7 (1)	1			1		
3.Building Control	1	4	2	1			
4.Mobile Testing			2				
5.Land use		2	3		4	3	1
6.WasteCollection & Cleaning	5	5	4	2		1	
7.Water Quality & Wastewater Control	3		5	4	3 (1)	6 (1)	
8.Underground & Surface Water Use	1			4 (2)	1	3	1
9.Irrigation	3	1	5	3	3	6	1
10.Mining & Energy (Oil & Natural Gas)	2	1	3	9	6	3	3
11.Fishery & Marine Protection			3	6		3	
12.Forestry, Forest Products & Husbandry	2	8	12	12	4	3	
13.Sightseeing	1						
14. Protected Areas, Fauna & Flora	1		1	1	3 (1)		
Total (198 (4))	26(1)	22	42	43(2)	28(2)	31(1)	6

(Source) Author.

(Notes) Numbers shown here are the number of regulations enacted in Provinces and Districts/Cities in Indonesia. Provincial regulations are included and shown in parentheses.

(Source) Categorized by Author, based on"Perda Online" data. 198 Local Regulations out of 2639 relate to environmental matters. In this list, the number of DKI's environmental regulations is excluded, same as in the database.(http://www.perdaonline.org/?act=search&q=lingkungan+hidup&qi=&yr_fr=1999&yr_to=2007&kp=11&m=y&pg=14 visited 1 January 2007).

Table 7 Present Situation of Enacted Laws under the EMA of 1997 (December 2006)

	1.General/ Enforcement	2.Water Pollution	3.Marine Pollution	4.Air Pollution	5.Wastes(B3)	6.EIA	7.Land/ Forest Fire	8.Organ-ization
Before yr. 1997	A25(97)	L35(95),L36A(95), L51(95), L52(95), L42(96), L09(97)	L45(95)	L35(95), L15(95), L15(96), L48~50 (96),L45(97), BO205(96), BO107(97)	KB05/05(94),DB01/09(95),BO02~05/BAP/09(95),BO255/08(96), Edaran BO 08/SE/02(97)	L42(94),L56(94)	L45(95)	
1998		L5			BO02/01,BO05/01,BO04/01			
1999		GR 19		GR 41	GR 18 (amended by GR 85)	GR27		
2000						L2,L4,L5,L40,L41	GR 150	
2001	L7	GR 82	L4,L47		GR 74	L17,L50,L42,BO8, BO9	GR 4	
2002	L56,L58,B50/E/Ejp/01/02*					L95		
2003		L28, L29, L37, L110, L111, L112, L113, L114, L115, L142		L129, L141	L128			
2004	L04/04	L122, L202	L51, L179, L200, L201	L155, L252				L148, L197
2005~	L5(05)	L2(05)				L45(05)		

(Source) Author. Data collected from "Himpunan Peraturan Perundangan-undangan Bidang Pengelolaan Lingkungan Hidup 2007."
(Notes) "A" is Act, "L" is Ministerial Order of the Environment (KEPMENLH), "GR"is Government Regulation, "DB" is BAPEDAL Order (Keputusan BAPEDAL).
**Surat Jaksa Agung Muda 58TINDAK PIDANA Umum*

Table 8 Present Situation of Arrangement of Implementing Laws under the EMA 1997 (as of 2007)

Delegating Provisions	Proposed Type of Law	Content of Stipulation	Provided Implementing Laws
Art.5(3)	Law	Right to participate in environmental management	
Art.8.3	GR	Natural resources utilized for public welfare	
Art.11.2	PD	organizational arrangements and institutional procedure	PD 0.2/02, PD 16/00, PD 16/01,PD 101/01
Art.12.2	Law	decentralization and deconcentration	
Art.13.2	GR	Transferring of affairs to local Governments	GR 25/00
Art.14.2	GR	Quality standards, prevention of and coping with pollution	GR 41/99(Air) GR 4/01(Forest fire)
Art.14.3	GR	Standards criteria of environmental damage	GR 4/01(Forest fire)
Art.15.2	GR	EIA	GR 27/99
Art.16.3	GR	Business and/or activity of waste management	GR 74/01
Art.17.3	GR	Management of toxic and hazardous materials	GR 18/99, GR 85/99
Art.18.2	Law	License to conduct a business/activity	
Art.20.5	GR	Disposing of waste	Drafting (2007)
Art.22.1	Law	Supervision of compliance; business and/or activity	Already applied
Art.24.2	Law	explanation and fulfilling the request of the supervisor	L07/01, L56/02, L58/02
Art.26.1	Law	Procedure for determining expenses and retribution	
Art.33.2	GR	dispute settlement	GR 54/00 (ADR)
Art.37.3	GR	Class Action	GR 78/03

(Source) Author.

(Notes): "PD" is Presidential Decree, "GR" is Government Regulation, "L" is Ministerial Order of Lingkungan Hidup.

REFERENCES

Andi Hamzah. Penegakan Hukum Lingkungan,Sinar Grafika, 2005.

BAPPENAS. Visi dan Arah Pembangunan Jangka Panjang (PJP) Tahun 2005-2025,2003.

Din Muhammad.Bberapa Catatan Penegakan Hukum Lingkungan di Indonesia(Penindakan Pelanggaran Hukum Lingkungan: Prosiding Lokakarya, Kantor Menteri Negara Kependidikan dan Lingkungan Hidup Bekerjasama dengan Environmental Management Development in Indonesia (EMDI), 1991.

H. Abdurrahman. Sustainability Development in Managing natural resources in Indonesia (Pembangunan Berkelanjutan dalam Pengelolaan Sumber Daya Alam Indonesia), a paper submitted to National Law Development Seminar VIII (Penegakkan Hukum dalam Era Pembangunan Berkelanjutan, National Law Development Center (BPHN)), Ministry of Justice and Human Rights, July 14-18, 2003.

Himpunan Peraturan Perundangan-undangan di bidang Pengelolaan Lingkungan Hidup Indonesia, Ministry of Environment, Indonesia, 2006.

Kebijakan Legislasi Bidang Agraria dan Sumber Daya Alam dalam Program Legislasi Nasional (PROLEGNAS) 2005-2009, February 1, 2007.

Komisi Hukum Nasional (KHN). Transisi Bayang-bayang Negara: Tata Reformasi Hukum di Indonesia 1999-2001, 2002.

Komisi Hukum Nasional (KHN). Kebijakan Reformasi Hukum (Suatu Rekomendasi), KHN, 2003.

Kementerian Negara Lingkungan Hidup. Sejarah dan Latar Belakang (January 5, 2007 visited). (http://menlh.go.id/archive.php?action=info&id=3)

Koesnadi Harjasoemantri. "Hukum Tata Lingkungan" (8th edition), Gadja Mada University Press, 2005.

Koesnadi Harjasoemantri Ekologi, Manusia, dan Kebudayaan,Pustaka Utama, 2006.

Koesnadi Harjasoemantri, Naoyuki Sakumoto, coed. Current Development of Laws in Indonesia, Institute of Developing Economies/JETRO 1999.

Komisi Hukum Nasional. Tata Reformasi Hukum di Indonesia 1999-2001, Transisi di Bawah Bayang-Bayang Negara, Negara Kemitraan Bagi Pembaruan Tata Pemerintahan Indonesia, 2002

Marjan Peeters. Elaborating Integration of Environmental Law: the Case of Indonesia. Workshop Revisi Undang-undang No. 23 Tahun 1997 Tentang Pengelolaan Lingkungan Hidup, p. 26.

Mas Achmad Santosa. Good Governance Hukum, Library of PSHK, 2001.

M.G. Faure. Towards a New Model of Criminalization of Environmental Pollution:

the Case of Indonesia, Workshop Revisi Undang-undang No. 23 Tahun 1997 tentang Pengelolaan Lingkungan Hidup, 2004, p. 18.
Munadjat Danusaptro. Towards as ASEAN Environmental Law, Jakarta, Binacipta, 1984, p. 944.
Naoyuki Sakumoto. Environmental Management and Decentralization in Indonesia, The State of the Environment in Asia 2005/2006, Springer.
Naoyuki Sakumoto. Decentralization and the Environmental Management in Indonesia (The State of Asian Environment 2005/06, edited by Environmental Council of Japan), Springer, 2003.
Naoyuki Sakumoto. Ed., Pollution Control in Asian Countries and Enforcement Issue, 2005 (in Japanese).
Naoyuki Sakumoto.ed, Environmental Law in Asian Countries (South/Southeast Asia), Revised, Institute of Developing Economies, 1998 (in Japanese).
NHT Siahaan. Hukum Lingkungan, Pancuran Alam, 2006.
Nicole Niessen. Decentralized Environmental Management, Working Paper Seminar "Revision of Indonesia's Environmental Management Act 1997," Bogor, August 30-31, 2004. p. 20.
Pembangunan Nasional (BAPPENAS). Kajian Awal Penyusunan Rencana Pembangunan Jangka Panjang (PJP) 2005-2025: Bidang Sumber Daya Alam dan Lingkungan Hidup; Laporan Akhir, 2002, pp.78-82.
Robert Patzewr. Environmental Law Compliance and Enforcement: Final Report on Adviosorship, EDI/Dalhousie Univesity.
Waddel.Environmental Law Study in Indonesia; Gap Analysis, 2002.
Yoshihiro Nomura, Naoyuki Sakumoto, coed. Environmental Law and Policy in Asia, Institute of Developing Economies, 1997.

NOTES

[1] Undang-undang nomor 4 Tahun 1982 tentang Ketentuan –ketentuan Pokok Pengelolaan Lingkungan Hidup.
[2] Koesnadi Hardjasoemantri." Hukum Tata Lingkungan" (8th edition), Gadja Mada University Press, pp. 39-65.
[3] H. Abdurrahman. Sustainability Development in Managing Natural Resources in Indonesia (Pembangunan Berkelanjutan dalam Pengelolaan Sumber Daya Alam Indonesia)', a paper submitted to National Law Development Seminar VIII (Penegakan Hukum dalam Era Pembangunan Berkelanjutan, National Law Development Center (BPHN)), Ministry of Justice and Human Rights, July 14-18, 2003, p. 13.
[4] Acts No. 22 (decentralization of political powers) and No. 25 (decentralization of budget) in 1999, both of which were later amended by No. 32 and No.33, respectively, in 2004.
[5] Kebijakan Legislasi Bidang Agraria dan Sumber Daya Alam dalam Program Legislasi Nasional PROLEGNAS) 2005-2009, (http://www.smeru.or.id/beritadaerah/files/legislasiAgraria270405.htm)(visited February 1, 2007).
[6] Naoyuki Sakumoto. Decentralization and the Environmental Management in

Indonesia (The State of Asian Environment 2005/06, edited by Environmental Council of Japan), Springer, 2003.
[7] Munadjat Danusaptro. Towards as ASEAN Environmental Law, Jakarta, Binacipta, 1984, p. 94.
[8] Kementerian Negara Lingkungan Hidup. Sejarah dan Latar Belakang (January 5, 2007 visited). (http://menlh.go.id/archive.php?action=info&id=3)
[9] Panitia Perumus dan Rencana Kerja Bagi Pemerintah di Bidang Lingkungan Hidup.
[10] Panitia Inventarisasi dan Evaluasi Kekayaan Alam.
[11] Data are collected from the website of National Secretary(Sekretariat Negara http://www.indonesia.go.id/index.php/content/view/111/77/ (visited February 1, 2007).
[12] The method of dividing developmental stages as well as information owes much to the document "Sejarah dan Latar Belakang"(Kementerian Negara Lingkungan Hidup). Koesnadi harjkasoemantri"Hukum Tata Lingkungan" (8th edition), Gadja Mada University Press.
[13] PT. Lapindo caused a serious mudflow incident in May 2006, and the damages are still expanding. In October 2006, when PT. Lapindo tried to transfer to other companies, one of the receiving companies denied the succeeding compensation to the neighboring people on the condition that there did not exist any contract made between the company and the people.
[14] Areas discussed in REPELITA II are; population and human settlement and the environmental management, agriculture and environmental management, mining, industry and the environmental management, utilization of marine resources, and supportive measures of natural resources and environmental management.
[15] REPELITA II, p. 131.
[16] Ibid. p. 137.
[17] Ibid. Sejarah dan Latar Belakang, p. 1.
[18] Ibid. Koesnadi, pp. 70-71.
[19] Sukarno's founding father's philosophies to establish Indonesian State consisted of five principles.
[20] Badan Pengendalian Dampak Lingkungan Hidup established by PD No. 23 of 1990.
[21] PROKASI, Program Kali Bersi
[22] Program Langit Biru
[23] Program Pembangunan Nasional 2000-2004.
[24] BAPPENAS Homepage. (visited, January 1, 2007). http://www.bappenas.go.id/index.php?module=ContentExpress&func=viewcat&ceid=-2&catid=6&bid=32&cid=15
[25] Chapter 10, PROPENAS 2000-2004.
[26] Matriks Kebijaksanaan Program Pembangunan Hukum.
[27] Included are the Mining (Act No. 11 of 1967), Petroleum and Natural Gas (Act No. 8 of 1971), Conservation of Natural Resources and Biodiversity (Act No. 5 of 1990), Fisheries (Act No. 9 of 1985), Natural Resources, Variety of Plants, Marine Protection, Healthy Livestock, and Energy.
[28] The proposed 120 laws are listed in the PROPENAS Matrix list.

[29] However, "Tata Reformasi Hukum di Indonesia 1999-2001, Transisi Dibawah Bayang-Bayang Negara (Komisi Hukum Nasional, Negara Kemitraan Bagi Pembaruan Tata Pemerintahan Indonesia, 2002) says that environmental law sector does not invite much attention and that the forest fire occurred in 1999-2000 in Kalimantan might have not yet been understood from a legal aspect of mistaken forestry management, p. 20.

[30] BAPPENAS. "Visi dan Arah Pembangunan Jangka Panjang (PJP) Tahun 2005-2025," 2003.

[31] Ibid. p. 39.

[32] Nicole Niessen. Decentralized Environmental Management, Working Paper Seminar "Revision of Indonesia's Environmental Management Act 1997," Bogor, August 30-31, 2004. p. 20.

[33] This neglect is symbolically expressed in the structure of REPELITA I (1969/70 ~ 1973/74). Chapter on Legal Development is placed 13th of 16 chapters.

[34] Indonesia was the last to enact the basic environmental law among the then ASEAN member countries. Philippines; Philippine Environmental Policy (1977) and Philippine Environmental Code (1977), Singapore; Environmental Public Health Act (1968), Malaysia; Environmental Quality Act (1974), Thailand; Improvement and Conservation of National Environment Quality Act (1975).

[35] Kantor Menteri Negara Kependudukan dan Lingkungan Hidup Bekerjasama dengan Environmental Management Development in Indonesia (Project EMDI), 1991.

[36] Ibid. p. 8. Examples pointed out by the author on ambiguous wordings that might cause interpretation problems are following; "menyebabkan lingkungan" (Article 1(7)), "Mengakibatkan lingkungan" (Article 1(8)), and "barang siapa" (Article 22(1) and (2)).

[37] Ibid, p. 20.

[38] Din Muhammad.Beberapa Catatan Penegakan Hukum Lingkungan di Indonesia(Penindakan Pelanggaran Hukum Lingkungan: Prosiding Lokakarya, Kantor Menteri Negara Kependidikan dan Lingkungan Hidup Bekerjasama dengan Environmental Management Development in Indonesia (EMDI), 1991.

[39] Naoyuki Sakumoto. Environmental Management and Decentralization in Indonesia, The State of the Environment in Asia 2005/2006, Springer, pp. 216-223.

[40] Article 28J provides the duty of human rights to pay certain respect to other people's human rights; however this is too general in its expression to apply on the environment. According to the Author's survey, the number of Asian countries where provide environmental rights aspect alone at the Constitutional level are only three out of 14 countries(Philippines, Thailand, and Indonesia). Naoyuki Sakumoto "Public Participation in EIA among Asian Countries," Naoyuki Sakumoto ed., "EIA in Asian Countries and the Tasks," (Institute of Developing Economies, IDE, JETRO, 2006), 131p .

[41] Kementerian Perencanaan Pembangunan Nasional/ Badan Perencanaan Pembangunan Nasional (BAPPENAS). Kajian Awal Penyusunan Rencana Pembangunan Jangka Panjang (PJP) 2005-2025: Bidang Sumber Daya Alam dan Lingkungan Hidup; Laporan Akhir, 2002, pp.78-82.

[42] Article 7(1) provides that every person or juristic person shall be prohibited to make any behavior that may cause pollution and destruction of fishery habitat and/or the environment. (later amended (No.31 of 2004)).
[43] Himpunan Peraturan Perundangan-undangan di bidang Pengelolaan Lingkungan Hidup Indonesia, Ministry of Environment, Indonesia, 2006.
[44] Marjan Peeters. Elaborating Integration of Environmental Law: the Case of Indonesia. Workshop Revisi Undang-undang No. 23 Tahun 1997 Tentang Pengelolaan Lingkungan Hidup, 26p.
[45] Ibid.
[46] M.G. Faure. Towards a New Model of Criminalization of Environmental Pollution: the Case of Indonesia, Workshop Revisi Undang-undang No. 23 Tahun 1997 Tentang Pengelolaan Lingkungan Hidup, 2004, 18p.
[47] Ibid.
[48] Ibid.Marjan 7p.
[49] According to an official at Ministry of Environment in Indonesia, the review of draft on EMA will begin in the later half of 2007(as of January 2007).
[50] Two workshops are: Workshop Revisi Undang-undang No. 23 Tahun 1997 Tentang Pengelolaan Lingkungan Hidup tgl. 30-31 Agustus 2004; and Seminar Pemikiran Perubahan Undang-undang Nomor 23 Tahun 1997 Tentang Pengelolaan Lingkungan Hidup, tgl. Desember,15, 2003.